



OFFICE OF THE PURCHASING AGENT

TOWN OF ARLINGTON
730 Massachusetts Avenue
Arlington, MA 02476

Telephone (781) 316-3003
Fax (781) 316-3019

DATE: May 4, 2022

TO ALL BIDDERS

BID NO. 22-20

SUBJECT: Stratton School, Bishop School and Peirce School Playgrounds

ADDENDUM NO. 1

TO WHOM IT MAY CONCERN:

With reference to the bid request relative to the above subject, please note the following:

SEE ATTACHED

ADDENDUM MUST BE ACKNOWLEDGED WITH BID SUBMISSION.

All other terms, conditions and specifications remain unchanged.

Very truly yours,

Town of Arlington

Domenic R. Lanzillotti
Purchasing Officer

SECTION 01 23 00: ALTERNATES

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. All of the Contract Documents, including the conditions and general requirements of the Contract, Division 00 and applicable parts of Division 01, apply to the work under this Section.
- B. The Contractor shall carefully examine all the Contract Documents for requirements that affect the work of this Section. The exact scope of this Section cannot be determined without a thorough review of all specification sections and other Contract Documents.

1.2 SUMMARY

- A. The Schedule of Alternates included in this Section lists all the Alternates that appear in the Contract Documents, and the specification Sections which are affected by each Alternate.
- B. For each of the Alternates scheduled at the end of this Section, bidders shall state the amount in the proposal to be added to or deducted from the Contract Sum for the work.
- C. Consult the individual Specification Sections and the Drawings for detailed requirements of each Alternate.

1.3 GENERAL INSTRUCTIONS

- A. Each Bidder shall be held fully responsible for examining the scope of the Alternates generally defined herein and for recognizing any modifications to his work caused by any Alternate.
- B. The Bid Alternate Price shall be complete cost, including overhead, profit, bonds, insurance, transportation, and all other costs connected with, or incidental to, the work described.
- C. Alternates listed below in the Schedule of Alternates are listed in order. The Contract will be awarded on the basis of the Base Bid only, or the Base Bid plus any number of Alternates strictly added in order.
- D. All dimensional and quantity estimates provided in the descriptions of the work below (noted with “approx.”) are provided for initial reference only; exact dimensions and quantities for the full extent of the work as described in the Drawings and Specifications shall be confirmed in field by the Contractor before submitting the price. The Contractor shall be responsible for the full extent of the work described, not to be limited by the

approximate quantities.

1.4 ALTERNATES

- A. Definition: "Alternates" are alternate products, materials, equipment, systems, methods, units of work, or major elements of the construction, which may, at the Authority's option and under the terms established by the Contract or Agreement, be selected for the work in lieu of the corresponding requirements of the Contract Documents or in addition to the work of the Base Bid as noted.
- B. Alternate Requirements: A Schedule of Alternates is included at the end of this Section. Each Alternate is defined using abbreviated language, recognizing that the Contract Documents define the requirements. Coordinate related work to ensure that work affected by each Alternate is complete and properly interfaced with work of each selected Alternate.
- C. Provide written proposals for each Alternate on the Bid Form for the Authority's consideration. Each proposal amount shall include the entire cost of the Alternate portion of the work, including overhead, profit, and other costs including cost of interfacing and coordinating the Alternate with related and adjacent work.

1.5 SCHEDULE OF ALTERNATES

- A. **Alternate No. 1 – DEDUCT from the Base Bid at Stratton School the specific asphalt walk repaving and repainting the existing handrail as indicated as the DEDUCT ALTERNATE on the STRATTON – MATERIALS PLAN with reference to the related details and associated specifications. ADDENDUM NO.1**
- B. **Alternate No. 2 – DEDUCT from the Base Bid at Peirce School the specific asphalt walk indicated as the DEDUCT ALTERNATE on the PEIRCE – MATERIALS PLAN with reference to related details and associated specifications. ADDENDUM NO.1**
- C. **Alternate No. 3 – DEDUCT from the Base Bid at Bishop School the continuous poured in place surfacing at the swings only and include Engineered Wood Fiber and associated wear mats. This material change is indicated as the DEDUCT ALTERNATE on the BISHOP – MATERIALS PLAN with reference to related details and associated specifications. ADDENDUM NO.1**
- D. **Alternate No. 4 – DEDUCT from the Base Bid at Stratton School the continuous poured in place surfacing at the swings only and include Engineered Wood Fiber and associated wear mats. This material change is indicated as the DEDUCT ALTERNATE on the STRATTON – MATERIALS PLAN with reference to related details and associated specifications. ADDENDUM NO.1**

PART 2 – GENERAL
NOT USED

PART 3 – EXECUTION
NOT USED

END OF SECTION
ALTERNATES
SECTION 01 23 00

SECTION 12 93 00
SITE FURNISHINGS AND IMPROVEMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. This section is only a portion of the Contract Documents. All of the Contract Documents, including Conditions of the Contract and Division 1 General Requirements, apply to this section.

1.2 DESCRIPTION OF WORK

- A. The work of this section includes installation of the site furnishings noted specifically as being purchased by the Town of Arlington directly from the product vendors. The City's purchase includes delivery to the project site. **Contractor is responsible for unloading site furnishings from delivery vehicles.** All furnishings in this section not specifically noted as Purchased by Owner, shall be furnished and installed by the Contractor whether salvaged from on site or new as indicated in the Contract Documents.
1. Dero - Heavy-Duty Hoop Bike Rack, (2) per site, TOTAL OF 6
 2. DuMor 32-Gal Receptacle with Bonnet Top, (1) per site, TOTAL OF 3
 3. DuMor 6' Slat Backed Bench, TOTAL OF 10
 4. DuMor Oval Picnic Table with (6) Seats, TOTAL OF 4
 5. DuMor Oval Picnic Table with (8) Seats, TOTAL OF 3
 6. JayPro Basketball Goal – "The Titan", TOTAL OF 4
 7. JayPro Basketball Goal – "The Church Yard", TOTAL OF 2
 8. **Reinstalled Salvaged** Community Board **with Salvaged Plaques ADDENDUM NO.1**
 9. Reinstalled Salvaged Memorial Stone
 10. **Paint Refurbishment System for Existing Handrail, DEDUCT ALT #1, ADDENDUM NO.1**
- B. The following items shown on the Drawings and/or noted herein shall be furnished and installed under their Sections of the specifications:
1. Concrete for concrete footings under 32 13 13 CONCRETE.

1.3 RELATED WORK

- A. Carefully examine all the Contract Documents for requirements that affect the work of this Section. Other specification sections that directly relate to the work of this Section include, but are not limited to the following:
1. Section 01 23 00 - Alternates
 2. Section 31 10 00 – Site Clearing and Preparation
 3. Section 31 23 00 – Excavation Filling and Grading
 4. Section 32 13 13 – Concrete
 5. Section 32 18 16.13 – Playground Protective Surfacing

1.4 SUBMITTALS

- A. The General Contractor shall verify by field inspection that all items within this section conform to the specified requirements prior to installation.

1.5 DELIVERY, STORAGE AND HANDLING

- A. The City's purchase includes delivery to the project site. **Contractor is responsible for unloading site furnishings from delivery vehicles.** Deliver materials and products and provide adequate protection against damage. Handle in strict compliance with manufacturer instructions and recommendations and store off the ground. Protect from all possible damage including, but not limited to chipping, staining, cracking and other damage. Sequence deliveries to avoid delays, but minimize on-site storage.
- B. **Provide manufacturer's product material information and systems performance data for paint refurbishment system for existing handrails, DEDUCT ALT #1, ADDENDUM NO.1**

1.6 COORDINATION

- A. The work of this Section shall be coordinated with that of other trades affecting, or affected by, this work as necessary to assure the steady progress of the work of this Contract.
- A. Substrates: Proceed with work only when substrate construction and penetrating work is complete.

1.7 GUARANTEE

- A. In addition to the specific guarantee requirements of the GENERAL CONDITIONS and SUPPLEMENTARY GENERAL CONDITIONS, the Contractor shall provide the manufacturers' standard written warranty for each product within this specification. All of these guarantees shall be in addition to, and not in lieu of, other liabilities that the Contractor may have by law or other provisions of the Contract Documents.

PART 2 - PRODUCTS AND EXECUTION (Combined)

2.1 OWNER PURCHASED SITE FURNITURE

- A. Please refer to the drawings for the details about site furniture locations.
- B. Refer to APPENDIX A for installation instructions.
- C. The rep for MEOBrien is John McConkey (john.mcconkey@obrienandsons.com)
 - 1.) Dero, DuMor and JayPro products

2.2 **Reinstalled Salvaged Community Board with Salvaged Plaques ADDENDUM NO.1**

~~A. Cleanly saw embedded posts to remove decaying wood from base of post.~~

~~B. Paint refurbishment system for community board to be one coat of primer over wood and 2 coats of acrylic gloss. Color to be determined by Landscape Architect from Sherwin-Williams, www.sherwin-williams.com/ or approved equal.~~

~~1.) Submit product information for refinishing materials.~~

~~C. Reinstall Community Board on concrete pad mounted using concealed post tie. Concealed post tie to be galvanized steel with 1" standoff height powder coated base to reduce potential for future decay. Product to be Simpson Strong-Tie CPTZ Concealed Post Tie or approved~~

equal. Fasten per manufacturer's recommendations.
https://www.strongtie.com/retrofitpostbases_postbases/cptz_base/p/cptz

A. Salvaged plaques from existing community board, taking care to avoid damage to plaques. Store plaques in secure location.

B. Community Board basis of design is "Outdoor XL Message Center Cork Board 36"x60" with Posts | Top Hinged – Single Door Information Board" by Outdoor Display Cases (<https://outdoordisplaycases.com/>), model: LSIDMCTXL-3660, or approved equal.

C. Dimensions: Message Center is 60" Wide and 36" High, post dimensions (set of 2): 4"x4"x120". Rain cover is 8-1/2".

D. Door mounted on full length piano hinge (top-hinged) with CAM lock and keys (set of 2).

E. Cork board to be 60" x 36", maintenance free recycled plastic and impervious to water, chemicals and insects.

F. Colors to be selected by Landscape Architect during submittals.

ADDENDUM NO.1

2.3 Salvaged Memorial Stone

A. Chip off any existing concrete footing from Memorial Stone, taking care to avoid damage to Memorial.

B. Power wash Memorial Stone and reset per detail in drawings.

2.4 **Paint Refurbishment System for Existing Handrail, DEDUCT ALT #1, ADDENDUM NO.1**

A. Paint refurbishment system for existing handrail shall be one coat of Pro-Cryl Primer over bare metal and 2 coats of Pro Industrial DTM Acrylic Gloss, color to be B66B11011 Black, as manufactured by Sherwin Williams, www.sherwin-williams.com or approved equal.

ADDENDUM NO.1

2.5 CLEANING, REPAIR AND PROTECTION

- A. Repair minor damage to eliminate all evidence of repair. Remove and replace work that cannot be satisfactorily repaired.
- B. Provide temporary protection to ensure that the work will be without dirt, stains, damage or deterioration at time of final acceptance. Clean up stains and spills as they occur. Remove protections and clean as necessary immediately before final acceptance.
- C. Upon completion of the work and before acceptance, the Contractor shall remove and dispose of in an approved manner all surplus materials, rubbish, etc. which the Contractor may have accumulated during the course of the work and shall leave the site in a clean and orderly condition. The Contractor shall not abandon any material at or near the site regardless of whether or not it has any value.

END OF SECTION



WARNER LARSON
LANDSCAPE ARCHITECTS

Stratton School, Bishop School, and Peirce School Playgrounds – Addendum NO. 1

Bid #22-20

May 3, 2022

ADDENDUM NO. 1

*** All Bidders must Acknowledge Addendum NO.1 in their Bid.**

Specifications:

ITEM 1: Bid Form

- Alternate #4 line item added

ITEM 2: 01 23 00 Alternates

- Schedule of Alternates edited to include Alternate No.1 asphalt walk repaving and repainting of existing handrail at Stratton School playground. Alternates 2-4 renumbered accordingly.

ITEM 3: 12 93 00 Site Furnishings and Improvements

- Reinstalled Salvaged Community Board changed to Community Board with Salvaged Plaques
 - Community Board basis of design is "Outdoor XL Message Center Cork Board 36"x60" with Posts | Top Hinged – Single Door Information Board" by Outdoor Display Cases (<https://outdoordisplaycases.com/>), model: LSIDMCTXL-3660, or approved equal
- Added Paint Refurbishment System for Existing Handrail, DEDUCT ALT #1
 - Paint refurbishment system for existing handrail shall be one coat of Pro-Cryl Primer over bare metal and 2 coats of Pro Industrial DTM Acrylic Gloss, color to be B66B11011 Black, as manufactured by Sherwin Williams, www.sherwin-williams.com or approved equal

ITEM 4: Appendix A

- Addition of Rope and Net Replacement Instructions for Bishop School playground
- Addition of Custom Structure diagram for Stratton School playground

Drawings:

ITEM 5: L101 Bishop Site Prep

- Changed callout to Remove and Dispose existing message board and salvage plaques

ITEM 6: L103 Stratton Site Prep

- Adjusted LOW line to include ramp repaving for DEDUCT ALT #1

ITEM 7: L201 Bishop Materials Plan

- Changed callout for new Community Message Board with Relocated Plaques
- Renumbered DEDUCT ALT #3
- Added callout for rubber kick mat at swings in DEDUCT ALT #3

ADDENDUM NO.1

Stratton School, Bishop School, and Peirce School Playgrounds

05/03/2022

Page 2 of 2

ITEM 8: L202 Peirce Materials Plan

- Renumbered DEDUCT ALT #2
- Added callout for Wide Flush Curb with Fence
- Added Wide Flush Curb with Fence to legend

ITEM 9: L203 Stratton Materials Plan

- Added callout for DEDUCT ALT #1 repaving asphalt walkway paving
- Added callout for DEDUCT ALT #1 repaint handrail
- Adjusted location of bike racks and trash receptacle based on field conditions noted during Pre-Bid Conference site visit
- Renumbered DEDUCT ALT #4
- Added callout for rubber kick mat at swings in DEDUCT ALT #4

ITEM 10: L303 Stratton Layout Plan

- Adjusted location of bike racks and trash receptacle based on field conditions noted during Pre-Bid Conference site visit

ITEM 11: L403 Stratton Grading Plan

- Added ramp grading information for DEDUCT ALT #1 repaving asphalt walkway paving

ITEM 12: L502 Landscape Details

- Revised 6/L502 Flush Cast in Place Concrete Curb to replace concrete cradle with gravel borrow; adjusted curb height and added rebar
- Revised 8/L502 PIP Rubber Surfacing to replace concrete cradle with gravel borrow; adjusted curb height and added rebar
- Added 14/L502 Wide Flush Curb with Fence to clarify flush condition and dimensions at Peirce School playground
- Added 15/L502 Community Message Board to replace with new community board based on deterioration of existing message board noted during Pre-Bid Conference site visit

ITEM 13: L503 Landscape Details

- Removed 13/L503 Reset Community Sign based on deterioration of existing message board noted during Pre-Bid Conference site visit

Responses to Questions:

Question 1: Section 116800-6 section 2.02 item D. item 2, 3,4 Contractor to have warranties on the town purchased items?

Response: Town will provide manufacturer's product warranties on all Town-purchased equipment and site furnishings. General contractor to have warranties on all contractor-purchased items. General contractor's 1-year warranty on the overall contract shall include workmanship (labor) for any Town-purchased equipment or site furnishings, since there may be deficiencies not product-related that need to be corrected.

Question 2: Please provide estimated delivery dates of Town-purchased play equipment and site furnishings.

Response: Estimated delivery dates will be addressed via forthcoming ADDENDUM NO.2.

APPENDIX A

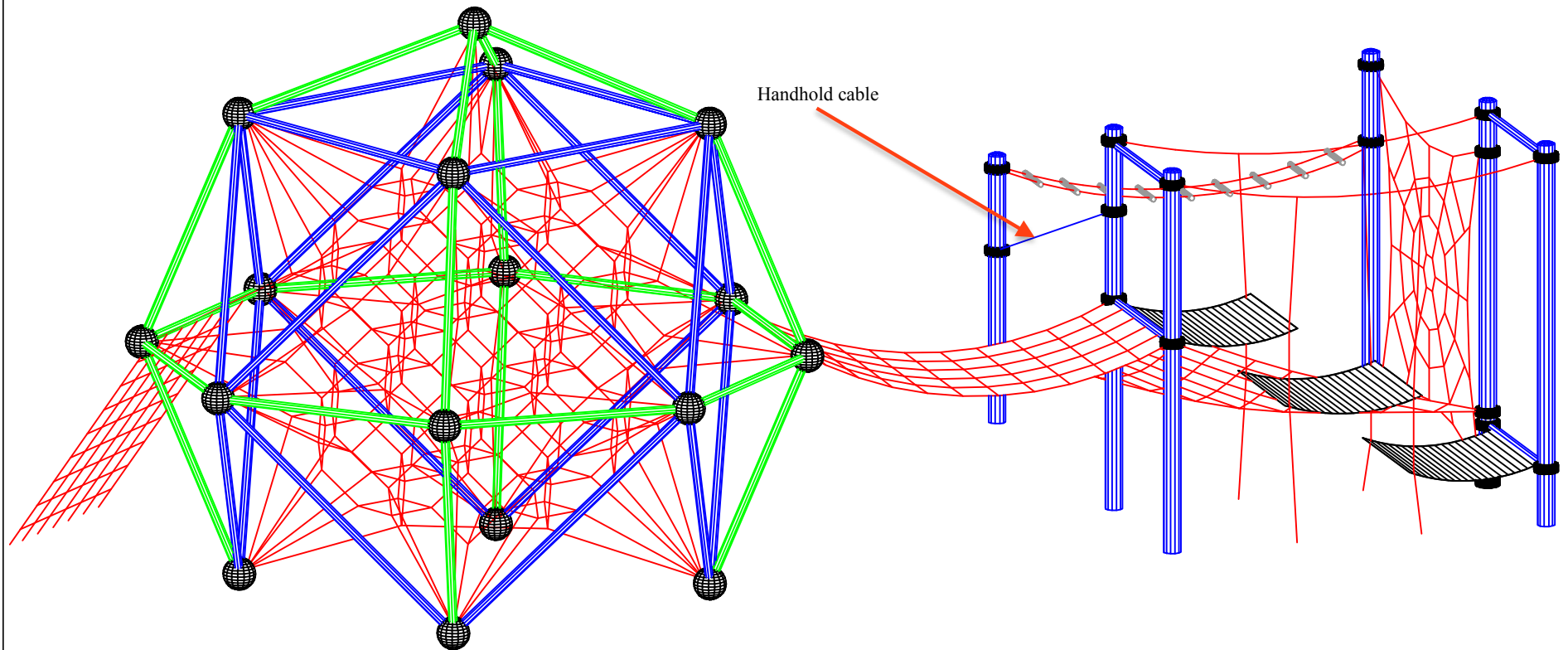
INSTALLATION INSTRUCTIONS FOR OWNER-SUPPLIED PLAY EQUIPMENT AND FURNISHINGS

	PAGES
BERLINER - SPACEBALL (ROPE AND NET REPLACEMENT ONLY, ADDENDUM #1, 5/2/2022)	2 (3-33)
UTIPLAY/PLAYWORLD -BISHOP SCHOOL	33-361
KOMPAN - STRATTON SCHOOL (INCLUDES CUSTOM STRUCTURE, ADDEDUM #1, 5/2/2022)	362-455 (363-367)
LSI - PEIRCE SCHOOL	456-592
LSI- VIBRA CHIMES (ALL SCHOOLS)	593-600
TRASH RECEPTACLES	601-602
PICNIC TABLE	603-604
BACKED BENCH	605-606
BIKE RACK	607-616
BASKETBALL GOAL	617-627
NON-VERBAL COMMUNICATION SIGN BOARD	628

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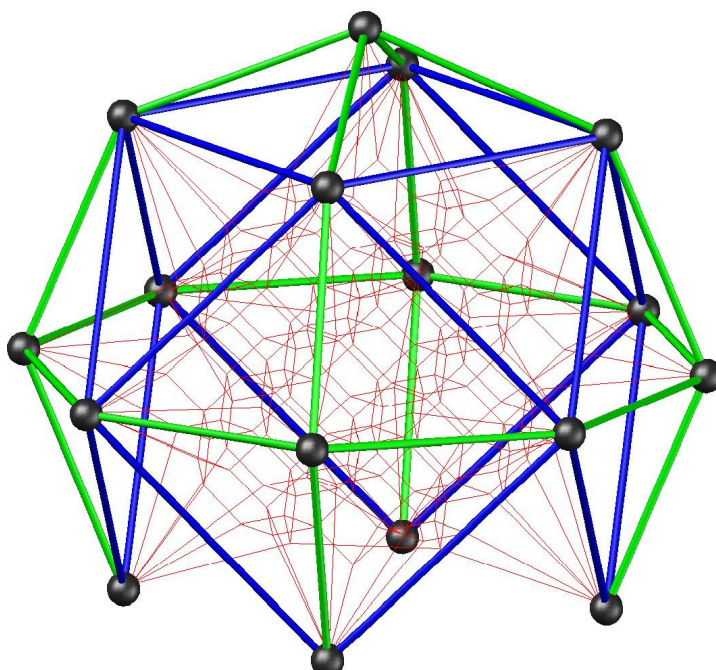
Univers
Bishop School
perspective 1
Spaseball L
+ accessories

2007	date	name	drawing no.	scale
work on	16.07	Stoppel	KOM.864.00	1/4"=1'
change				



MOUNTING INSTRUCTION

for Spaceball



Contents

1 Personnel and Tools	
1.1 Personnal.....	
1.2 Tools	2
2 Validity Fields of the Mounting Instruction	2
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Appendix Set of drawings and Parts list

Perspective.....	
Top view	
Front view	
Safety Area.....	
Foundation Plan	
Plan Framework	

1 Personnel and Tools

1.1 Personnel

You need a minimum of 2 skilled labour for the right assembling

1.2 Tools

The following tools are required for the mounting:

- 1 lifting gears (e.g. pulley block, rope pulley)
- 2 ladder, height depending on model: (for type S: abt.10', for type M and L: abt. 13', for type XL: abt. 20')
- 3 ratchet with ½" square drive
4. elongation with ½" square drive, 2 ¾" long
5. socket for wrenches with ½" square drive, wrench size 30
hexagon socket wrench SW8
6. wrench SW17 and box wrench SW30
8. hammer
9. spade
10. bubble level

Tools are available for account.

2 Validity Fields of the Mounting Instruction

This mounting instruction applies for the standard device without extensions and ad-on-units (e.g. slide, suspension bridge, access net).

For devices with extensions and ad-on-units please read that additional instructions attached to this manual. Please also use the attached drawing set.

3 Foundation

3.1 Foundation work

For support of the foundation work you find enclosed with the Spaceball delivery a foundation plan and a foundation template, made of framework parts.

! ATTENTION: The parts for the foundation template will be required for the assembly of the Spaceball framework !

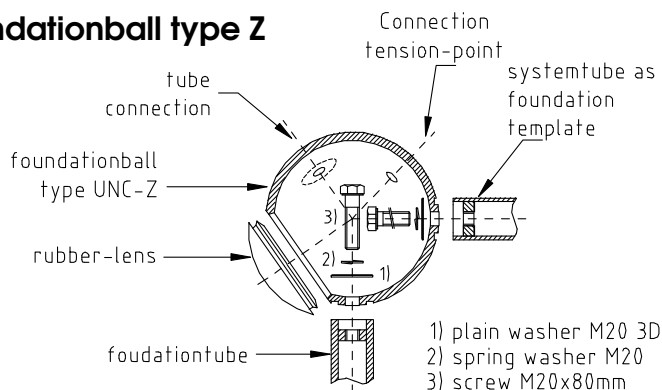
It is important to use the prescribed measures for the foundation work, because the different parts are produced for these dimensions.

You need a minimum quality for the concrete of 3500 psi.

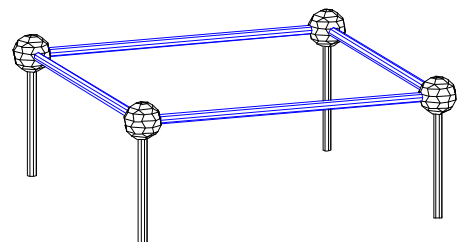
! ATTENTION: For combinations you will get a complete foundation plan with your drawing set, including foundation for the ad-on-units !

- A. Coarse adjustment of the foundation points at the play area.
 (The precise measures are in the foundation plan.)
- B. Dig the pits for the different foundations.
- C. Assemble the foundation template.
 - The foundation template consists of 4 structural tubes, which you will need later again for the ramework, the 4 foundation tubes and the 4 foundation balls type Z.
 - At first you have to center the structural tubes at the 4 foundation balls type Z. Then fix the structural tubes with hexagon socket head cap screws M 20 x 80, washers and spring washers from the inner side of the balls.
 - If all screws are fixed and the foundation template is centered, you have to assemble the 4 foundation tubes at the 4 foundation balls by 4 countersunk screws with hexagon socket M 20 x 70.

Foundationball type Z



Foundationtemplate



- D. Adjust the foundation template. (Refer to foundation plan.)
- You have to adjust the foundation template in such a way, that the structural tubes are in an angle of 90° to each other and on the same level.
 - You have to adjust the balls in such a way in height, that the 4 tops of the 4 balls are in horizontal play level.
- E. Concrete the foundation with a minimum quality for the concrete of 3500 psi.
- F. Allow the concrete to set.
- G. Dismount the foundation template in reverse order as described in point C.
- H. Provide the foundation balls type Z and the structural tubes for the later framework mounting.

4 Framework

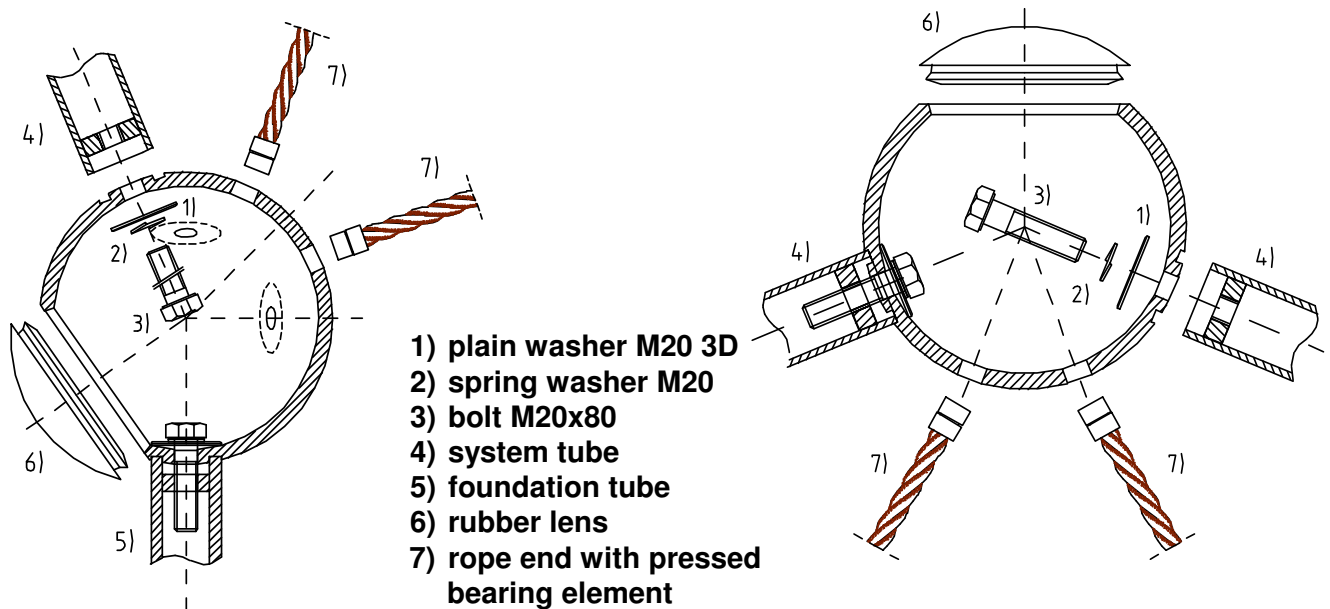
4.1 Mounting

Attention to the following information:

- The right position of structural tubes and balls is described in the framework plan.
- The framework will be assembled level by level.
- The markers for the ball types are at the border of the assemble opening.
- The right mounting position is, that the drill-hole with diameter 6 mm shows down and the assemble opening is directed to the outside of the framework. The assemble opening of the ball will be always mounted with a little declination. This arrangement of the drill-holes allows a correct fixing of the structural tubes. For the top ball you get the right mounting position with help of the drill-holes to fix the structural tubes.
- Each ball has a drill-hole with diameter 6 mm at the lowest point of the ball. The right mounting position is, that the drill-hole with diameter 6 mm shows down and the assemble opening is directed to the outside of the framework. The assembly opening is always mounted opposite the net tensioning points. This arrangement allows a correct fixing as the drill holes are already in the right position.
- To get a safe work-plain at the second and third level you should use a plank bottom at the fixed framework parts.
- Tighten the screws at the foundation balls at first **not** with full strength.
- After completing framework mounting you have to tighten the screws completely. Please adhere to the use of tools recommended in chapter 1.2 in order to avoid higher initial tension

The way of assembling is:

- A. First fix the foundation ball to the foundation tube. Don't pull the hexagon screw M20x80 too tight at first.



Section foundationball type Z type B1

Section ball

- B. The right position of balls and structural tubes is described in the framework plan.
- C. The balls (refer to the framework plan for the right ball type) have to be fixed with hexagon head cap screws M 20 x 80, washers and spring washers at the structural post tubes.
- D. Then you have to center the structural tubes at the drill-holes of the balls. The structural tubes should be fixed with hexagon head cap screws M 20 x 80, washers and spring washers from the inner side of the ball.
- E. The other structural tubes and balls have to be assembled level by level. At first you fix the ball and then the other structural tubes with hexagon head cap screws M 20 x 80, washers and spring washers.
- F. After completing framework mounting you have to tighten the screws completely. **Please adhere to the use of tools recommended in chapter 1.2 in order to avoid higher initial tension.**

5 Spacenet

All bearing elements are pressed to the net. The preassembled supporting- and tensioning devices M20 are in the box with the ball connectors.

5.1 Hang On

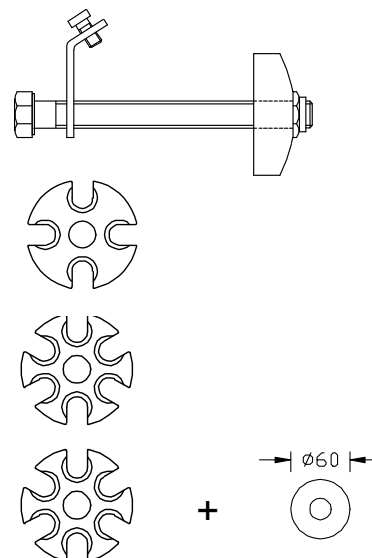
Attention to the following information:

- The five upper net ends are marked with a tag. The net end building the top carries a tag “oben” and “top” for the connection to ball B1. The other four net ends are marked with a tag “E1” for the connection to the balls E1 on the second frame level.
- The preassembled tensioning devices with the M20-nut are to be tightened at first by hand only.
- There are three different sorts of tensioning devices:

5xtype B) Necessary for the connection to ball connectors type B, BP and B1. Has got four slots for rope ends.

8xtype E) Necessary for the connection to ball connectors type E and E1. Has got six slots for rope ends.

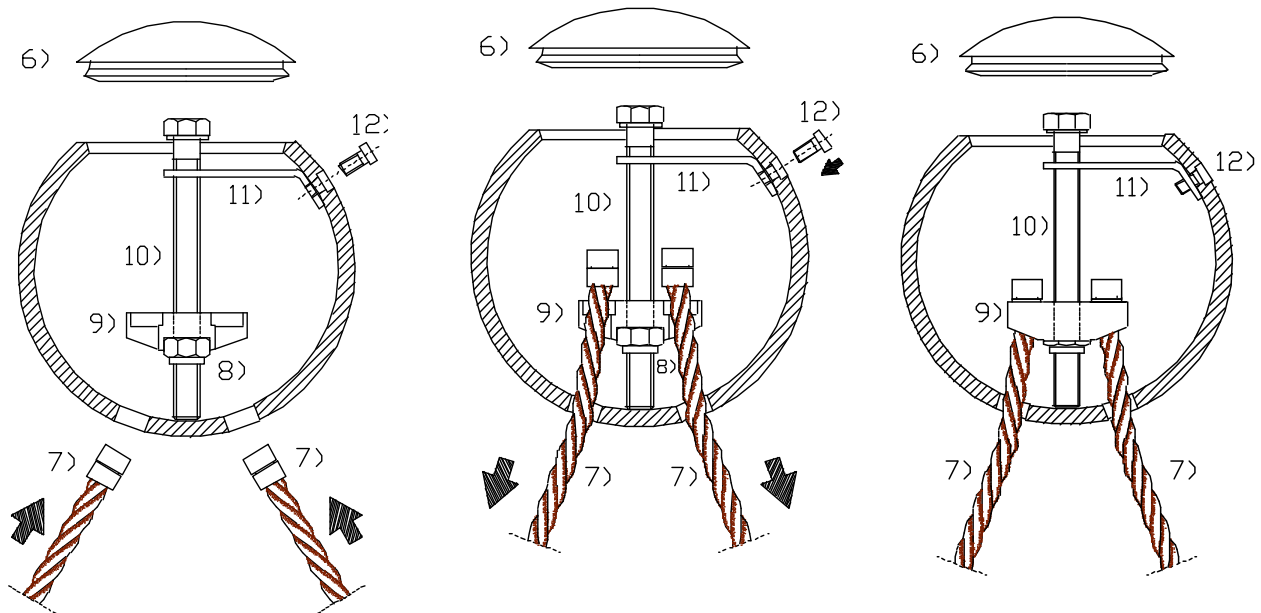
4xtype Z) Necessary for the connection to ball connectors type Z. Has got six slots for rope ends and an additional washer with diameter 60mm.



Please work in the following order:

- Lay the preassembled tensioning devices into the right ball connectors.
- With the help of a lifting gear (e.g. pulley block) draw the uppermost side of the net (with the mark “oben” and “top”) into the top of the framework.
- Put the four rope ends into the open holes at the bottom of ball B1 (top of the unit) and connect them to the tensioning device. Put the pressed bearing element at the top of the rope sideways into the slot of the tensioning disk and fix it by pulling it towards the disk (see drawing).
- Do the same procedure downwards at the other ball connectors. At the balls E, E1 and Z 6 rope ends are to be put into the open slots.
- Please make sure that ropes are not coinciding before the ball connectors.**

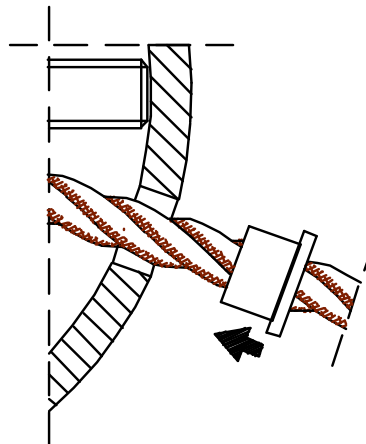
- F The guide plate that is premounted to the tensioning device now can be fixed to the ball connector with the hexagon socket screws M10x20. The location holes are in the ball connector.



- 6) rubber cap
7) rope end with pressed bearing element
8) hexagon nut M20
9) tensioning disk

- 10) hexagon screw M20x200
11) guide plate
12) hex. socket screw M10x20

- G Now put all guide bushes that are on the rope ends from the outside into the ball connectors with a hammer and a wrench SW17 to close the gaps between rope and ball.



5.2 Tensioning

The way of tensioning is:

- A. Before you start please doublecheck that all the cloverleaf rings are in the right place. If they are not in the right position, you have to adjust the rings before tensioning. It is important that the rope junctions stay in the right position throughout the whole mounting procedure of the net. Again make sure that rope ends are not coinciding before the ball connectors.
- B. Start with the balls type Z. Fasten the screw M20x200 with the box wrench SW30 to the point where the top edge of the tensioning disk reaches to the head of the screw the measure as in table 1. Put the washers with diameter 60mm onto the rope ends at the balls Z. With the flat nut M20 pull the washer tight, so that all rope ends are placed safely in their tensioning disks.
- C. Starting from the top now fasten all the tensioning devices in diagonal order until all ropes in the net are tightened (3rd level: balls B1, 2nd level: balls E1, 1st level: balls B, BP and E). Adjust the tension to meet the measures between the top of the tensioning disk and the head of the screw as per table 1.

Spaceball I Type	Balltype				
	B,BP	B1	E	E1	Z
S	5 1/8	5 1/8	5 1/2	5 1/2	5 1/2
M	3 1/2	3 1/2	3 1/2	3 1/2	3 1/2
L	3 1/2	4	5 1/2	4	4
XL	4 3/4	4 3/4	4 3/4	4 3/4	4 3/4

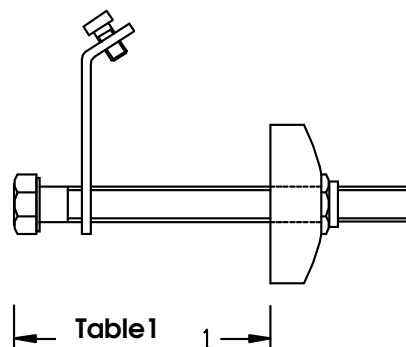


Table 1 (measures in inch)

- D. Depending on the actual play frequency the net has to be retensioned 1-2 weeks after the mounting.

6 Final Works

Make sure that all screwings and all guide bushes are in place and restore the ground under and around the play unit.

Close the assemble openings of the balls with rubber caps at the end of the mounting. Use a hammer to fit the rubber caps into the assemble openings.

! ATTENTION: Depending on the play frequency you have to tension the spacenet again after 1 - 2 weeks!

7 Maintenance

For our spacenets we recommend a maintenance twice a year or more often if you have a high play frequency. You need trained personnel to manage the maintenance work. Following steps are necessary:

7.1 Visual Check of all Parts

7.1.1 Framework

- balls:
Is there any demolition due to the balls outside influences?
Is the rubber cap still at the assemble opening?
- structural tubes:
Is there any demolition due to structural tubes from outside influences?
Look for corrosion and lacquer demolition.
(If necessary remove the corrosion from the structural tube and paint the tube with inorganic zinc - tease the lacquer demolition.)

7.1.2 Net

- rope condition:
Control the abrasion of the polyamide yarn cover.
Control if wire breakage exists.
(If necessary, e.g. in case of wire break, change the rope parts.)
- tension points:
Look for corrosion of the eye bolts and the shackles.
(If necessary remove the corrosion and paint the tube with inorganic zinc.)
- tension of the net:
Control the right position of the cloverleaf rings and the tension of all ropes.
(If necessary increase the tension and adjust the cloverleaf rings in the right position.)

7.2 Increase the Tension

All screwed connections are at the inner side of the balls. At first you have to remove the rubber caps from the assemble openings with the help of a big screw driver. After opening you start diagonal in each level from the top to the bottom. Use the hexagon box wrench SW30 for retensioning at the screw M20x200m. You have to tighten the self locking nuts in such a way, that the tension of the spacenet is the same in each rope. Finally you have to fit the rubber caps into the assemble openings again with a hammer.

7.3 Check of the Foundation Tubes

In theory using steel in concrete causes no problems as concrete is covered by a passive layer, due to the alkaline environment. Only when the imbedded steel is located on the edge, the passivation is reduced as the surface of the concrete is carbonised. Therefore a minimum distance to the surface has to be observed.

That means that corrosion is impossible in the concrete as there is no potential in the electrochemical series. Corrosion will occur where the concrete of the foundation reaches the soil. This is where the intensifying electrolyte is present as liquid, converged on the foundation surface. A ring-shaped corrosion on the humid surface is to be expected if the steel is unprotected. However, our steel tubes are protected against corrosion by their Zinc-/Epoxy-/Polyester-powder coating finish.

A demolition due to corrosion is consequently not possible when the coating is not damaged.

In order to prevent pitting and localised corrosion the transition area has to be checked annually.

! Attention: In order to avoid demolition please use a piece of wood or a brush to free the foundation tube. With a sharp tool you may damage the surface layer!

MOUNTING INSTRUCTIONS

TERRANOS[®] NETSCAPES

Order No. :

Project No. :

Details of the **FroX**-connector for **Terranos-combinations** for 16mm-ropes

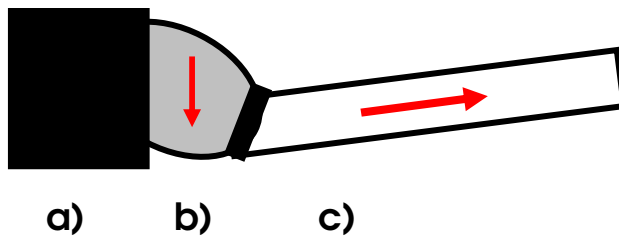
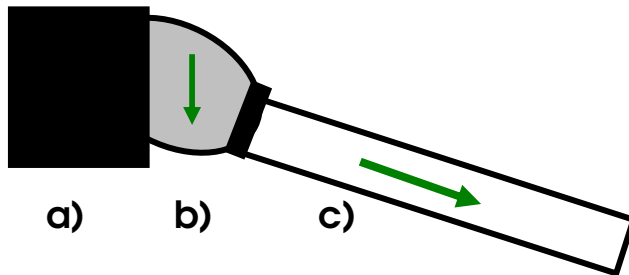
Hardware required for each FroX-connector:

1. Terranos clamp with hole pattern
2. Rope attachment, including: FroX, Nylon-ball and pressed on aluminium sleeve.
3. 2 x hexagon socket head screws (M10x35 ss) and 2x security washers for M10 ss
4. Allan key: 8mm
5. Retaining compound

Please note: There is only one type of FroX-connector, however it can be positioned in two different ways depending on the direction of the load applied. The connector MUST be in the correct position for the connector to function properly.

TERRANOS Netscapes

For **downward** loads (when the rope points downwards), the aluminium sleeve of the FroX-connector should point **downwards**:



Side view of the FroX connector for **downward** loads.

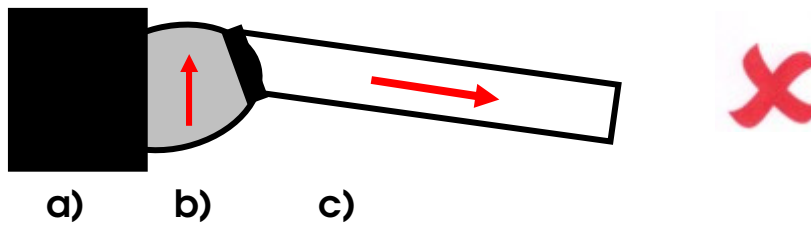
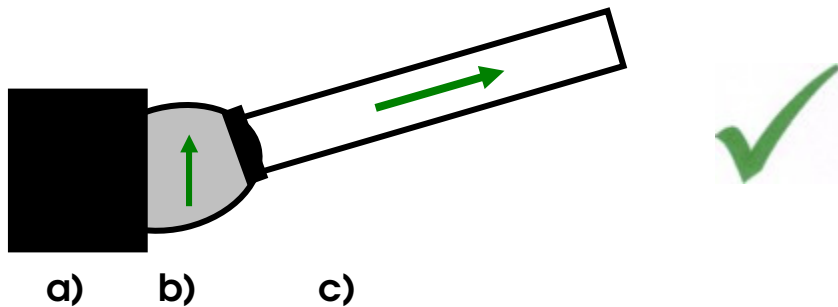
Key:
a) Clamp (black)
b) Aluminium sleeve (silver)
c) Rope



Photograph of the FroX connector in the downward load position

TERRANOS Netscapes

For **upward** loads (**when the rope points upwards**), the silver section of the FroX-connector should point **upwards**:



Side view of the FroX connector for **upward** loads.

Key:
a) Clamp (black)
b) Aluminium sleeve (silver)
c) Rope



Photograph of the FroX connector in the upward load position

TERRANOS®

Netscapes

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TERRANOS®

Netscapes

1 Equipment Required

1.1 Labour

To assemble the TERRANOS®-Netscape correctly, a minimum of two skilled persons are required.

1.2 Tools

The following tools are required during assembly:

1. Step ladder: approximately 2m long
2. Ratchet: with ½" square drive
3. Ratchet elongation: with ½" square drive, 70 mm long
4. Wrench socket: with ½" square drive, SW 17, SW 19, SW 30 (SW = wrench size)
5. Hexagon socket screw key, SW 8, SW 10, SW 14
6. Screw driver
7. Center punch
8. Hammer
9. Spade
10. Spirit level
11. Waterproof pencil
12. Flexible bracing ropes, support planks or keys (wedge, bolster) and wooden boxes (required for various methods of foundation preparation).
13. Push cart (if concrete transport is necessary)
14. Lifting gears, e.g. rope pulley, pulley block (if necessary)

All tools can be supplied upon request (for an additional cost).

2 Foundation Preparation

A foundation plan has been provided to assist in the preparation of the TERRANOS®-Netscape foundations. It is important that **all dimensions** detailed in the foundation plan are strictly adhered to, please refer to the plan during preparation.

2.1 Terranos posts

Please note: There are various post lengths and distances between foundation pits. Please refer to the foundation plan to ensure that each post is in the correct position in order to avoid future mounting problems. Use a spirit level to ensure that the posts are vertically upright.

The height of the final ground level (play level) should be 400 mm above the foundation surface. There are three different ways to position the posts correctly, the first three steps are the same for each variation:

1. Mark the positions of the foundations and dig the foundation pits. (Please refer to the foundation plan for dimensions.)
2. To create a foundation base, pour a layer of concrete 100mm thick into the foundation pit. (Minimum concrete quality: grade B 25, grain 0-16.)
3. Level the soil and allow the concrete to set for a minimum of 24 hours.

Attention: It is necessary to use the prescribed measurement of 1000 mm between the surface of the 100mm thick concrete base and the play level to avoid future mounting problems!

Variation 1

4. Position the posts so that they are situated in the middle of their respective foundation bases (refer to the foundation plan for the correct post/foundation pit combination). Stabilise the posts with flexible bracing ropes and use a spirit level to ensure that the posts are vertical.
5. Ensure once more that each post is in the correct foundation pit by comparing the height and post position with the foundation plan. Subsequently, concrete the foundations to secure the position of the posts. Minimum concrete quality: B 25 (grade of grain 0-16).
6. Allow the concrete to set completely.
7. Mark the position of the Terranos clamps on the posts for later assembly.
8. Restore the playground surface.

Variation 2

4. Fix fly nuts to the TERRANOS®-clamps.
5. Attach a pair of prepared TERRANOS®-clamps to each post.
6. Position the posts so that they are situated in the middle of their respective foundation bases. Stabilise the posts with wooden planks (refer to the Figure 1). Fix the planks to the posts under the fly nuts of the premounted TERRANOS®-clamps. Use a spirit level to ensure that the posts are vertical.

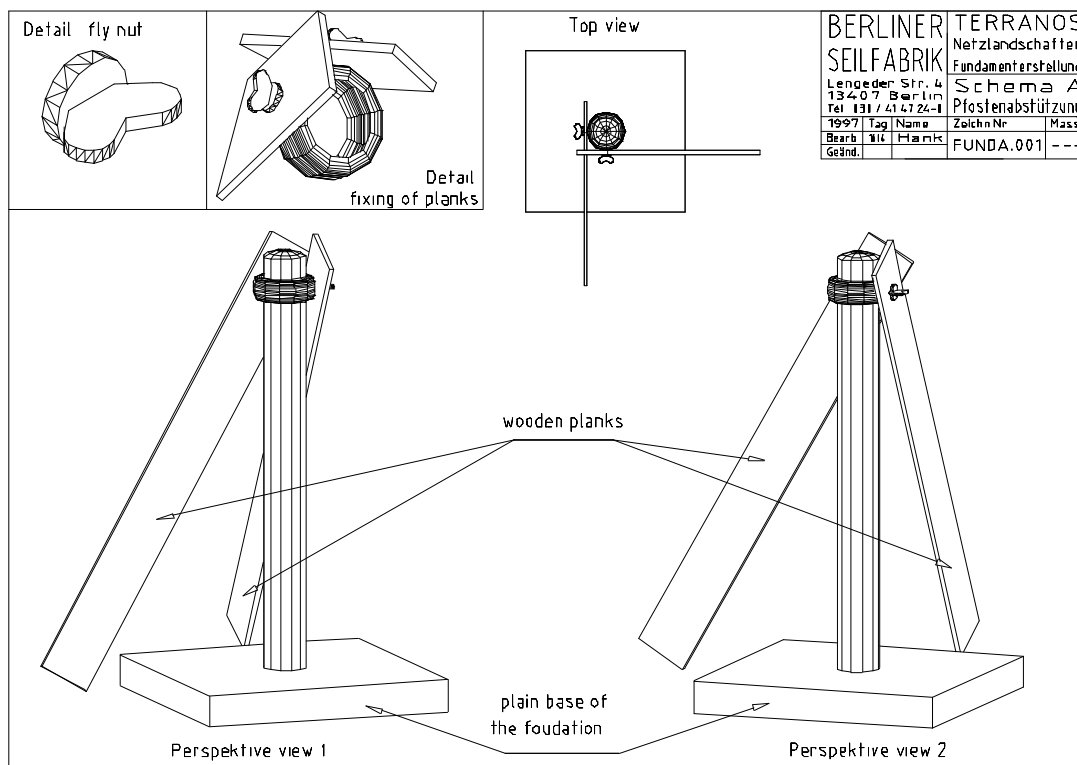


Figure 1: Schematic diagram depicting how to stabilise the foundation posts with wooden planks.

7. Ensure once more that each post is in the correct foundation pit by comparing the height and post position with the foundation plan. Subsequently, concrete the foundations to secure the position of the posts. Minimum concrete quality: B 25 (grade of grain 0-16).
8. Allow the concrete to set completely.
9. Remove the clamps and planks and mark the mounting positions of the Terranos clamps on the foundation posts for later assembly.
10. Restore the playground surface.

Variation 3

4. Assemble wooden boxes without a top and a bottom. The outer dimensions of the boxes are: 250 mm x 250 mm x height of the foundation. Refer to the figure below.
5. Position the boxes about the prepared foundation base so that the box is centred about the designated post position. (refer to Figure 2)

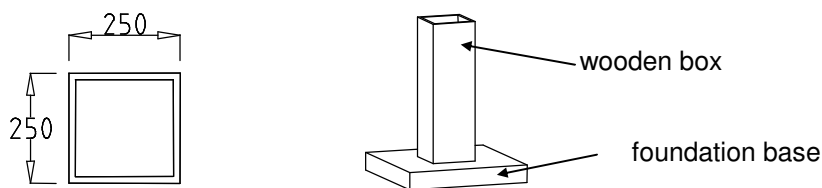


Figure 2: Schematic diagram demonstrating the 'Variation 3' method for foundation preparation.

6. Concrete the foundation around the outside of the wooden box. Minimum concrete quality: B 25 (grade of grain 0-16).
7. Allow the concrete to set completely.
8. Remove the wooden boxes from the foundations.
9. Place the posts into the foundation pits created by the wooden boxes (refer to the foundation plan for the correct placement of each pole). Fix the posts into an upright position with keys (wedge and bolster). Use a spirit level for the vertical adjustment.
10. Ensure once more that each post is in the correct foundation pit by comparing the height and post position with the foundation plan. Subsequently, concrete the foundations to secure the position of the posts. Minimum concrete quality: B 25.
11. Allow the concrete to set completely.
12. Restore the playground surface.

2.2 Stands, Platforms and Horizontal-Post Designs

Foundation preparation for these elements can be carried out as described in Chapter 2.1. Importantly, these elements must be **assembled prior** to concreting the foundations. Using hexagon socket screws (M20 x 70), fix Terranos clamps (two brackets) to each horizontal post at the Ø 21 drill holes. Using the Terranos clamps, connect the Terranos posts to the horizontal structural posts. Place the elements into their corresponding foundation pits. (Refer to Figure 3 below and for further information, refer to the foundation plan.)

Attention: Swing post brackets must point downwards. All other posts with brackets should be mounted so that the bracket points in the rope direction.

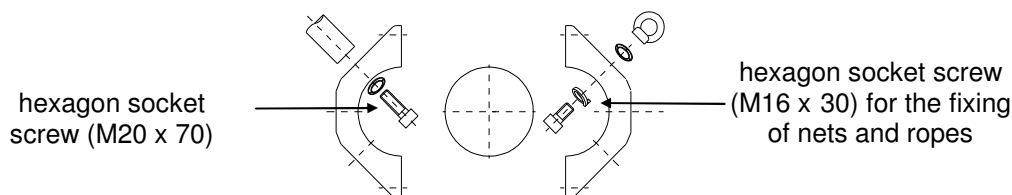
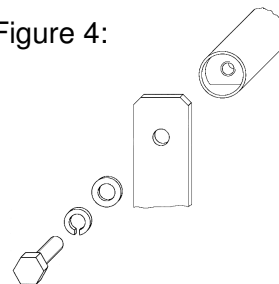


Figure 3: Configuration of the Terranos clamp.

2.3 Foundation Brackets and Access Nets

Centre the structural foundation post about the foundation brackets. Fix the structural post to the brackets with hexagon socket head cap screws (M20 x 80), washers and spring washers. Subsequently, adjust the post-bracket system as per the measurements detailed in the foundation plan.

Figure 4:



Attention: Don't restore the playground surface yet because the pre-mounted posts must be removed to mount the access nets.

2.4 Slides (all types)

The foundations of the slide must be concreted during the installation of the slide. This is necessary as each slide has unique dimensions, thus the foundation dimensions will vary for each playscape. For further details refer to the foundation plan.

2.5 Special Add-On-Units

For further add-on-units, specialised mounting instructions are required.

2.6 Dimensions

For specific measurements regarding the foundations, please refer to the foundation plan and the set of drawings provided. Minimum quality concrete required: B25.

3 Mounting

3.1 Introduction

A drawing set has been provided to assist the installation procedure. The set of drawings contains a foundation plan, special foundation drawings, a framework plan, perspective, partial and additional views, and tables as required.

Please note the following information:

- The correct position of the posts, clamps, nets and rope elements is described in the set of drawings.
- The position of add-on-units (e.g. QUADROPOLIS® devices, slides) and special structural posts (e.g. with brackets) is described in the set of drawings.
- Before fixing the Terranos clamps to the posts you must mount **all** nets, ropes and add-on units to the clamps.
- Special mounting instructions will be supplied for the mounting of UNIVERS® -, QUADROPOLIS® - and PICOLINO® devices, ALBEROS, GEO'S and special add-on units.
- It is recommended to lay wooden planks onto the completed sections of the frame to create a stable work platform for safer and easier construction of the successive framework levels.
- ***Attention: Tighten the hexagon socket head cap screws (M20 x 80) on the flag post with a high strength screwdriver to avoid unauthorised removing.***
- After completing the framework mounting you must tighten the screws completely. Please adhere to the use of tools recommended in chapter 1.2 in order to avoid excessive tightening and pre-stress of the connectors.
- Upon completion of mounting, close the assembly openings of the balls with rubber caps and restore the playground surface.
- Special requirements can be found in the specific mounting modules.

3.2 Terranos Clamps

Most nets, ropes and add-on units will be fixed to the posts with Terranos clamps. The clamps are ordered by type. Clamp type, fixing position and fixing height for each clamp is described in the set of drawings provided. Furthermore the fixing height for the Terranos clamps was marked on each post during foundation preparation.

Using a hexagon socket screw (M16 x 30) and a washer, connect one half of the Terranos clamp (the side with the $\varnothing 17$ drill hole) to the ring nut attached to the add-on elements. These ring nuts are directly connected to the add-on elements. Place a Schnorr washer between the ring nut and the Terranos clamp. Up to three add-on units can be attached to one side of the Terranos clamp (refer to Figure 5).

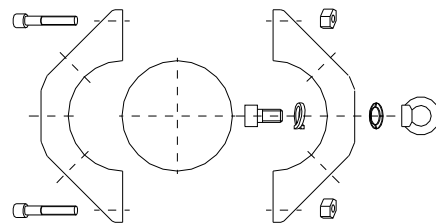


Figure 5: Attaching an add-on unit to a Terranos clamp.

When attaching a hammock, connect half of the Terranos clamp (the side with a $\varnothing 21$ drill-hole) to the pivot bearing of the hammock using a hexagon socket screw (M20 x 40). Tighten the screw with a high strength screw driver to avoid unauthorised removing (refer to Figure 6).

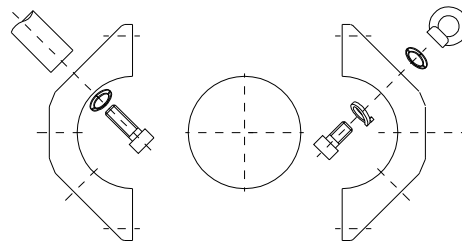


Figure 6: Attaching a hammock to a Terranos clamp.

The Terranos clamps for post connections were pre-mounted during foundation preparation. If you have to attach more than one add-on element, remove the Terranos clamp from the post and attach the fixed ring nuts of the add-on elements with a hexagon socket screw (M16 x 30). Place a Schnorr washer between the ring nut and the Terranos clamp (refer to figure 7).

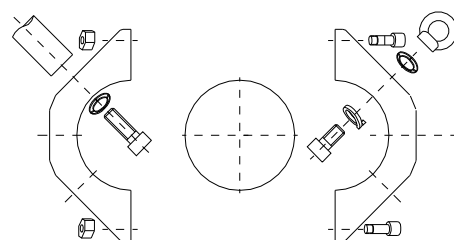


Figure 7: Attaching more than one add-on unit to a Terranos clamp.

3.3 Playscape Installation

Attach all add-on elements (e.g. nets, ropes, bridges etc.) between the posts. The correct mounting position is described in the set of drawings.

3.3.1 Net and Rope Elements

Net and rope elements can be fixed to the structural posts with Terranos clamps and/or rope clamps. The correct mounting position is described in the set of drawings provided.

Terranos clamp assembly (refer also to Chapter 3.2):

- A. First, connect the ring nuts of the add-on elements to the Terranos clamps (the side with a $\varnothing 17$ drill-hole), with hexagon socket screws (M16 x 30) and spring washers. Place a Schnorr washer between the ring nut and the Terranos clamp.

Attention: All add-on units attached to a Terranos clamp should be mounted at the one time. Attaching add-on units at different times increases the work load as each time an add-on unit is added, the clamps must be removed from the posts.

- B. Using hexagon socket screws (M10 x 45), connect both sides of the Terranos clamp together (i.e. the half connected to the add-on unit and the half connected to the post). The height of the clamp of the post was marked during foundation preparation and can also be found in the set of drawings provided.

To assemble the rope clamps:

- A. The position of the rope clamps will depend on the position of the rope. Rope clamps have the same colour as structural posts $\varnothing 60$ or $\varnothing 48$. Depending on the fastening requirements you can use single, double or 90° rope clamps. Attach the rope clamps to the structural posts using hexagon socket screws (M10 x 45) and self-locking nuts (refer to Figure 8).

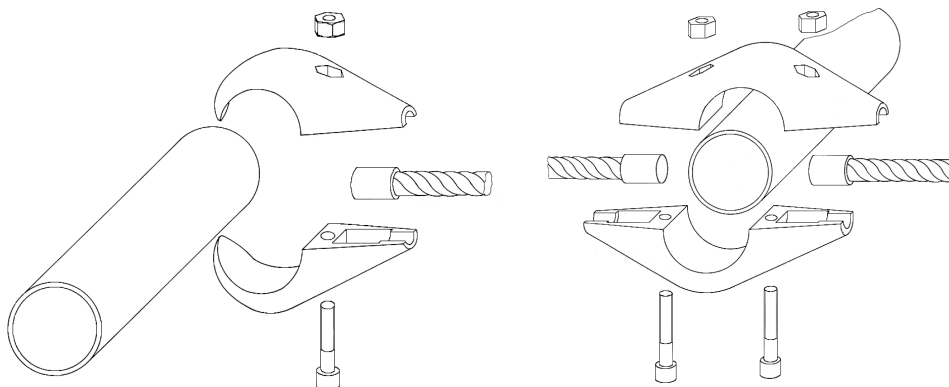


Figure 8: Schematic diagram of rope clamps and various methods of attachment.

- B. Tighten all screw connections.

3.3.2 Access Nets

- A. Mount the upper side of the access net, as described in chapter 3.3.1, with rope clamps, hexagon socket screws (M10 x 45) and self-locking nuts, or on the ring nuts to the Terranos clamp (the side with a Ø 17 drill-hole), with hexagon socket screws (M16 x 30) and spring washers. Place a Schnorr washer between ring nut and clamp.
- B. Subsequently, remove the pre-assembled galvanised structural post from the foundation brackets.
- C. Thread the post through the eyelets of the net.
- D. Now attach the galvanised structural posts to the foundation brackets.

3.3.3 Suspension Bridges

- A. Remove the shackle on one connection side of the suspension bridge.
- B. Hanging the suspension bridge:
 - 1. -at the stand:
 - I. Remove the Terranos clamp (the half with a Ø 17 drill-hole) from the horizontal post of the stand and connect it to the ring nuts of the bridge with hexagon socket screws (M16 x 30). Place a Schnorr washer between the ring nut and the Terranos clamp.
 - II. Hang the running surface to the horizontal structural post of the stand with shackles.
 - III. Re-connect both halves of the Terranos clamp (mounted at the running surface of the suspension bridge) with hexagon socket screws (M10 x 45).
 - IV. Connect the Terranos clamps (half with a Ø 17 drill-hole) to the ring nuts of the rail ropes, use hexagon socket screws (M10 x 45).
 - 2. -at the brackets of a UNIVERS®/QUADROPOLIS®- device:
 - I. First attach the shackles of the running surface,
 - II. then the shackles of the rail rope,
 - III. tighten the shackles with a U-bolt.
- C. Remove the U-bolt from the other side of the suspension bridge.
- D. Using a rope pulley, bring the second side of the suspension bridge to the connectors.
- E. Hang the suspension bridge as described in point B.

3.3.4 Jungle Bridge

- A. Remove the U-bolt on one connection side of the jungle bridge.
- B. Hanging the jungle bridge
 - 1. -at the jungle bridge stands:
 - I. Hang the running rope to the horizontal structural post of the stand with a shackle.
 - II. Attach the Terranos clamps (half with a \varnothing 17 drill-hole) to the ring nuts of the rail net. Place a Schnorr washer between the ring nut and clamp. Next, attach the clamps to the previously marked position of the Terranos posts with hexagon socket screws (M10 x 45).
 - 2. -at the brackets of a UNIVERS®/QUADROPOLIS®- device:
 - I. First attach the shackles of the running rope,
 - II. then the shackles of the rail net,
 - III. tighten the shackles with a U-bolt.
- C. Remove the U-bolt from the other side of the suspension bridge.
- D. Use a rope pulley to bring the second side of the jungle bridge to the connectors.
- E. Hang the jungle bridge to this side as described in point B.

3.3.5 Hammock

- A. Using a hexagon socket screw (M20 x 40), connect the Terranos clamp (the half with a \varnothing 21 drill-hole) to the pivot bearing of the hammock (refer to Figure 9). Tighten the screw with a high strength screw driver to avoid unauthorised removing. Now, connect both sides of the Terranos clamps together around the Terranos posts with hexagon socket screws (M10 x 45). The correct attachment point on the post was marked during foundation preparation and is also described in the set of drawings provided.

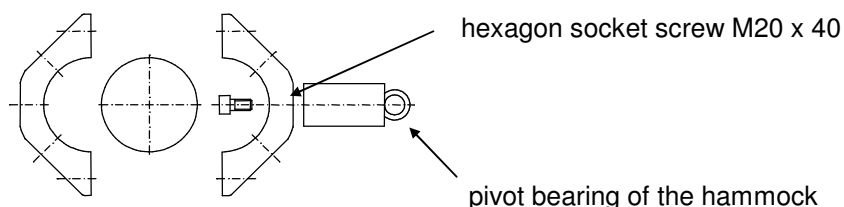


Figure 9: Connecting a hammock to a Terranous clamp

- B. For UNIVERS®/QUADROPOLIS®- devices, mount the pivot bearing of the hammock from the inner side of the ball with a hexagon socket screw (M16 x 30).
- C. Mount the other side of the hammock as described in points A and B.

3.3.6 Wobbly Bridge

Fix the wobbly bridge at the posts with Terranos clamps as described in chapter 3.3.1 at the height marked during foundation work. The required height is also described in the set of drawings provided.

3.3.7 Balancing Rope

- A. Remove the U-bolt on one connection side of the balancing rope.
- B. Hanging the balancing rope:
 - 1. -at the balancing cable stands:
 - I. Using hexagon socket screws (M16 x 30) connect the Terranos clamps (side with a Ø 17 drill-hole) to the ring nuts of the balancing rope. Place a Schnorr washer between ring nut and clamp.
 - II. Mount the Terranos clamps (side with a Ø 17 drill-hole and pre-assembled with the ring nuts) at the designated position of the Terranos posts with hexagon socket screws (M10 x 45).
 - 2. -at the brackets of a UNIVERS®/QUADROPOLIS®- device:
 - I. First, attach the shackles of the running surface,
 - II. then the shackles of the rail ropes,
 - III. tighten the shackles with a U-bolt.
- C. Remove the U-bolt on the other side of the balancing rope.
- D. Use a rope pulley to bring the other side of the balancing rope to the connectors on the other side.
- E. Attach the balancing rope to this side as described in point B.

3.3.8 Rail Ropes

Mount the rail ropes 800 mm above the nets, as described in chapter 3.3.1, using rope clamps, hexagon socket screws (M10 x 45) and self-locking nuts. Or, use the ring nuts which are attached to the Terranos clamps (side with a Ø 17 drill-hole) with hexagon socket screws (M16 x 30) and spring washers. Place a Schnorr washer between the ring nut and clamp.

3.3.9 Swings

Fix the swing attachments (pre-mounted in the factory) to the brackets of the horizontal structural post with hexagon head cap screws (M12 x 50), washers and self-locking nuts. Necessary nuts and bolts are fixed at the swing attachment.

3.3.10 Climbing Ropes and Rope Ladders

To mount the climbing ropes and rope ladders, follow the instructions as described in chapter 3.3.1. Use rope clamps, hexagon socket screws (M10 x 45) and self-locking nuts or, attach to the ring nuts which are connected to the Terranos clamps (with a Ø 17 drill-hole) with hexagon socket screws (M16 x 30) and spring washers. Place a Schnorr washer between the ring nut and clamp.

Dig the pit for the foundation plate. A minimum depth of 600 mm under the playground surface is required. The width of the pit depends on the measurements of the foundation plate. Place the foundation plate into the pit and tighten the climbing rope so that the rope is taut. If necessary, dig the pit deeper.

3.3.11 Slide – Narrow and Wide Type

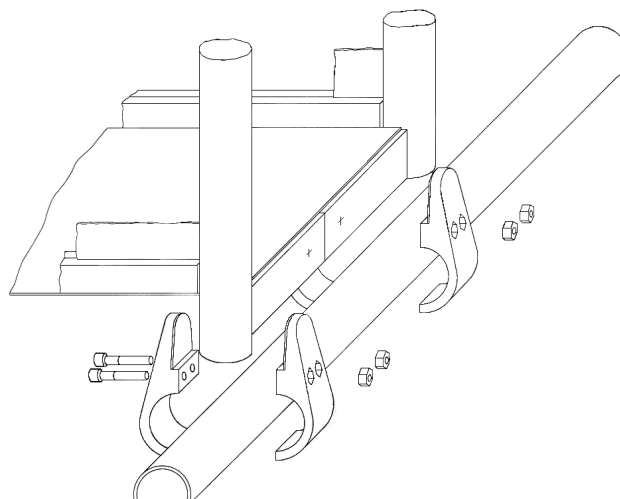
Slide posts and horizontal bars must be attached and adjusted to the Terranos clamps with hexagon socket screws (M16 x 30) and spring washers prior to concreting the foundations. For the correct position of the slide, refer to the foundation plan

Attention: The slide foundations must be concreted during the installation of the slide and not before. This is necessary as each slide has unique dimensions, thus the foundation dimensions will vary for each playscape. For further details refer to the foundation plan.

Mounting Instructions:

- A. Attach the slide to the horizontal structural post of the framework with panel clamps (with rubber insert), hexagon socket screws (M10 x 45) and self-locking nuts) (refer to Figure 10). At first, do not tighten the screws completely, as to enable adjustments to be made to the structure.

Figure 10:
Schematic
diagram
depicting the
slide mounting
procedure.



- B. Mark the points for the foundations on the play surface.
C. Dig the pits for the foundations.

Attention: During installation, the slide must be supported with planks in order to ensure that the prescribed mounting figures for height and length are accurate. (Refer to the side view drawing and foundation plan.)

- D. Stabilise the foundation with concrete: Minimum concrete quality: B 25.
- E. Mark the position of the slide supporting points.
- F. Mount the chemical anchors (shear connectors).
(refer to the special mounting instructions.)
- G. Connect the system slide to the chemical anchors (shear connectors).
- H. Attach the first side of the rail ropes to the slide with the rope clamps suitable for structural posts Ø 48.
- I. Mount the other side of the rail ropes on the declining structural posts of the standard framework, with rope clamps suitable for structural posts Ø 60.
- J. After mounting the slide you must tighten the eye bolts completely. Please adhere to the use of tools recommended in chapter 1.2 in order to avoid over-tightening and pre-stress of the connectors.

3.3.12 Space Cell

Fix the space cell to the posts with Terranos clamps as described in chapter 3.3.1 at the height which was pre-marked during foundation preparation. The necessary height is also detailed in the set of drawings provided.

3.3.13 UNIVERS® and QUADROPOLIS®- Devices

Refer to the drawing set for the correct assembly position of the UNIVERS® and QUADROPOLIS® devices. For the mounting of the device as well as the necessary add-on-units (e.g. rope ladder) special mounting instructions have been provided.

The net structures is mounted last, after foundation preparation and framework assembly. Install the net structures by beginning at the top of the framework structure. Then install the nets, panels and specialised add-on units.

ATTENTION: Depending on the play frequency you must re-tension the UNIVERS® net structures again after 1 - 2 weeks!

4 Final Tasks

Tighten all screws and restore the playground surface. Using a hammer, re-fit the rubber caps to the assembly openings of the balls.

5 Maintenance

For our playscape combinations we recommend maintenance twice a year, or more often if the structure has a high play frequency. Trained personnel are required for the maintenance work.

5.1 Visual Inspection of all Parts

5.1.1 Framework

- Clamps:
Do the clamps exhibit any external damage?
Look for damage to the lacquer.

- Structural posts:
Do the posts exhibit any external damage?
Look for damage to the lacquer and indications of corrosion.
(If necessary remove the corrosion from the structural post and paint the post with inorganic zinc.)

- Balls:
Do the balls exhibit any external damage?
Is the rubber cap still at the assembly opening?
Look for damage to the lacquer.

- Fasteners/connectors:
Do the fasteners/connectors exhibit any external damage?
Look for damage to the lacquer and indications of corrosion.
(If necessary remove the corrosion from the structural post and paint the post with inorganic zinc.)

5.1.2 Net and Rope Elements

- Rope condition:
Note the abrasion of the polyamide yarn cover.
Repair any wire breakages.
(If necessary replace damaged rope.)
- Fixing points:
Do the fixing points exhibit any external damage? Look for damage to the lacquer and indications of corrosion.
- Pivot Bearings/ Rungs:
Inspect pivot bearings and rungs for tension, function and condition.
(If necessary replace the parts.)

5.1.3 Panels

- Are all of the wooden panels in the correct position?
- Wooden panel condition:
Do the wooden panels exhibit any external damage?
Look for damage to the lacquer.
(If necessary, repair or replace the panels.)

5.1.4 UNIVERS® Net structures

- Net tension:
Ensure the cloverleaf rings are in the correct position and check the the tension of each ropes.
(If necessary, increase the tension of the net structures - see chapter 5.2 - and adjust the cloverleaf rings so that they are positioned correctly.)

5.2 Increasing the Tension of a UNIVERS® Net structures

To adjust the net tension you must access the screw connections located within the inside of the ball connectors. Remove the rubber caps with a large screwdriver and use a hexagonal box wrench (SW30) to re-tension the eye-bolts, starting diagonally in each level from the top of the structure to the bottom.

The self locking nuts must be tightened so that each rope in the net structures has the same tension. When the correct tension has been achieved, use a hammer to replace the rubber caps.

5.3 Inspecting the Foundation Posts

For corrosion to occur, three elements are required: an anode, a cathode and an electrolyte. The combination of these three elements results in the generation of an electrochemical potential, which causes corrosion to occur. In theory, there should be no problem when using steel in concrete, as the concrete is an insulator and acts as a protective, passive layer due to the alkaline environment it provides. However, concrete is a porous material which is subject to carbonation and can readily absorb solutions containing various aggressive species (i.e. chloride ions). Thus, if steel is located close to the surface of the concrete, passivation of the steel is reduced. Therefore a minimum thickness of concrete cover is required to reduce the likelihood of corrosion occurring. The thickness required will depend on a number of factors, including the grade of concrete used.

Corrosion of the steel will occur when concrete is in contact with the soil. The soil contains solutions of various salts and gases which act as an electrolyte to facilitate corrosion. The electrolyte is absorbed into the concrete and diffuses through to the steel surface, which results in corrosion of the steel. Indications of corrosion include cracking of concrete and/or a red-brown stain apparent on the surface of the concrete, due to the formation of rust.

However, our steel posts are safeguarded against corrosion as they are coated with a Zinc-/Epoxy-/Polyester-powder finish. The coating acts as a barrier which prevents aggressive ions from coming into contact and reacting with the steel surface. Therefore, corrosion of the post will not occur providing the coating is not damaged.

In order to prevent pitting and localised corrosion, the transition area must be inspected annually.

Attention: During inspection, to avoid damage to the posts please use a piece of wood or a brush to free the foundation post. With a sharp tool you may damage the protective surface layer and initiate corrosion!

Please note: All replacement parts and tools necessary for maintenance can be obtained by calling the Technical Hotline (refer to the first page for contact details). Please have the product identification number at hand. This number can be found written on the product label in a framework ball in the first level.



Bishop Elementary School



Bishop Elementary School



Installation Instructions

Challengers® Models CH0007, CH0009, CH0018,
CH0028, CH0038, CH0048, CH0058, CH0068,
CH0076, CH0256, CH0258
Steel Support Post w/ Cap
100 in. (2540 mm) to 224 in. (5690 mm)

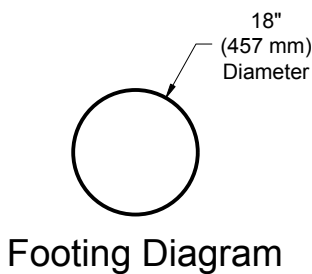
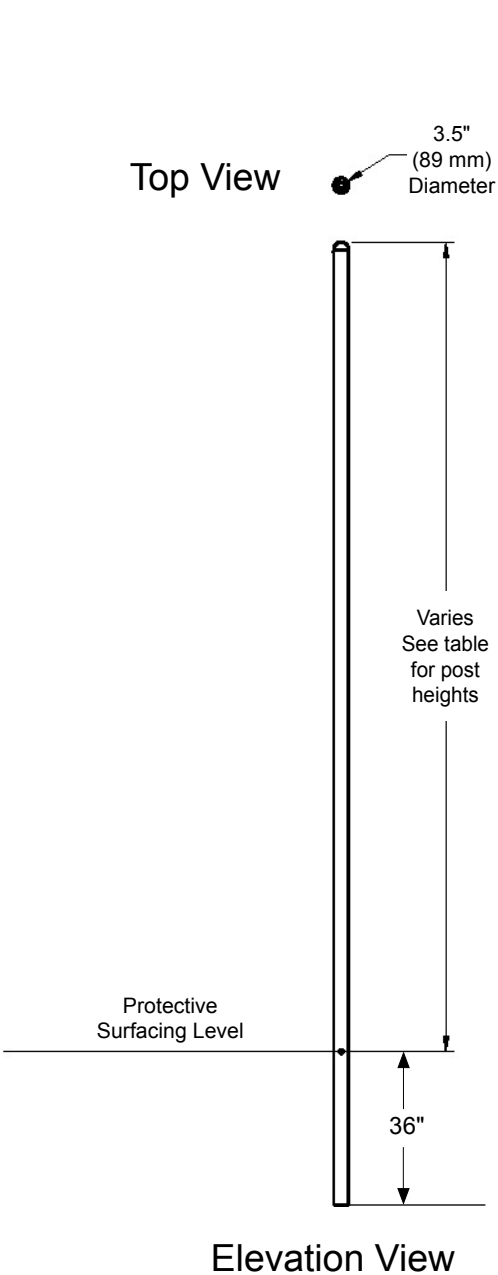
Installation Preparation

Recommended Crew: Two (2) adults
Installation Time: 1 man-hour
Concrete Required: 0.13 cubic yard (0,10 cubic meters)



Assembly View *(representative model)*

Installation Instructions



Model	Post Height	Post Height above Surfacing
ZZCH0007	100" (2540 mm)	64" (1626 mm)
ZZCH0009	112" (2845 mm)	76" (1930 mm)
ZZCH0018	124" (3150 mm)	88" (2235 mm)
ZZCH0028	136" (3454 mm)	100" (2540 mm)
ZZCH0038	148" (3759 mm)	112" (2845 mm)
ZZCH0048	160" (4064 mm)	124" (3150 mm)
ZZCH0058	172" (4369 mm)	136" (3454 mm)
ZZCH0068	184" (4674 mm)	148" (3759 mm)
ZZCH0076	200" (5080 mm)	164" (4166 mm)
ZZCH0256	212" (5385 mm)	176" (4470 mm)
ZZCH0258	224" (5690 mm)	188" (4775 mm)



Installation Instructions

__Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

__Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

__Step 2: Separate and identify all components and hardware.

__Step 3: Excavate footings as shown in the **Footing Details**.

__Step 4: Set the support post into excavated footings in accordance with placement called out on the footing diagram. The post should be placed on a perforated shipping tube cap or on another porous flat surface to prevent any buildup of moisture in the base of the post. Block the support post at the specified depth.

Note: Heights of the decks and play components are measured from the top of protective surfacing.

Final Details.

__Step 5: Plumb and level the support post. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

CH0007 - STEEL SUPPORT POST w/ CAP 100 in. (2540 mm)

PART NO.	DESCRIPTION	QTY.
CAP5036	POST - 3-1/2" O.D. x 100" STEEL w/ CAP & LBL AT 36"	1

CH0009 - STEEL SUPPORT POST w/ CAP 112 in. (2845 mm)

PART NO.	DESCRIPTION	QTY.
CAP5038	POST - 3-1/2" O.D. x 112" STEEL w/ CAP & LBL AT 36"	1

CH0018 - STEEL SUPPORT POST w/ CAP 124 in. (3150 mm)

PART NO.	DESCRIPTION	QTY.
CAP5040	POST - 3-1/2" O.D. x 124" STEEL w/ CAP & LBL AT 36"	1

CH0028 - STEEL SUPPORT POST w/ CAP 136 in. (3454 mm)

PART NO.	DESCRIPTION	QTY.
CAP5042	POST - 3-1/2" O.D. x 136" STEEL w/ CAP & LBL AT 36"	1

CH0038 - STEEL SUPPORT POST w/ CAP 148 in. (3759 mm)

PART NO.	DESCRIPTION	QTY.
CAP5044	POST - 3-1/2" O.D. x 148" STEEL w/ CAP & LBL AT 36"	1

CH0048 - STEEL SUPPORT POST w/ CAP 160 in. (4064 mm)

PART NO.	DESCRIPTION	QTY.
CAP5046	POST - 3-1/2" O.D. x 160" STEEL w/ CAP & LBL AT 36"	1

CH0058 - STEEL SUPPORT POST w/ CAP 172 in. (4369 mm)

PART NO.	DESCRIPTION	QTY.
CAP5048	POST - 3-1/2" O.D. x 172" STEEL w/ CAP & LBL AT 36"	1

CH0068 - STEEL SUPPORT POST w/ CAP 184 in. (4674 mm)

PART NO.	DESCRIPTION	QTY.
CAP5050	POST - 3-1/2" O.D. x 184" STEEL w/ CAP & LBL AT 36"	1

CH0076 - STEEL SUPPORT POST w/ CAP 200 in. (5080 mm)

PART NO.	DESCRIPTION	QTY.
CAP5052	POST - 3-1/2" O.D. x 200" STEEL w/ CAP & LBL AT 36"	1

CH0256 - STEEL SUPPORT POST w/ CAP 212 in. (5385 mm)

PART NO.	DESCRIPTION	QTY.
CAP0420	POST - 3-1/2" O.D. x 212" STEEL w/ CAP & LBL AT 36"	1

CH0258 - STEEL SUPPORT POST w/ CAP 224 in. (5690 mm)

PART NO.	DESCRIPTION	QTY.
CAP0422	POST - 3-1/2" O.D. x 224" STEEL w/ CAP & LBL AT 36"	1

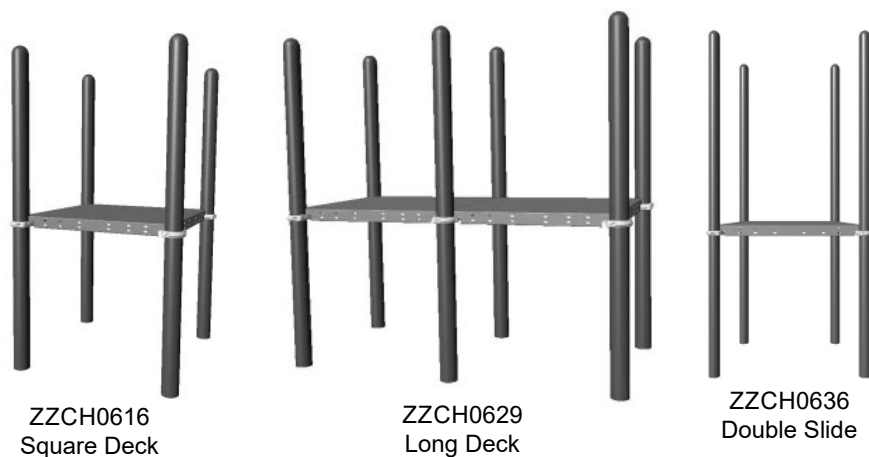


Installation Instructions

Challengers® Models CH0616,
CH0629, and CH0636
Square, Long, and Double Slide
Perforated Deck


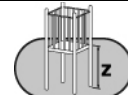

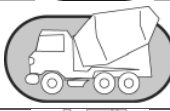


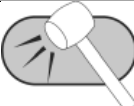
Installation Preparation

Recommended Crew (CH0616-36):..... Two (2) adults
Recommended Crew (CH0629):..... Four (4) adults
Installation Time (CH0616-36): 1 man-hour
Installation Time (CH0629):..... 2 man-hours
Use Zone:..... Refer to Master Drawing
User Group Age (years): ASTM/CSA: 2-12, EN: 2-14



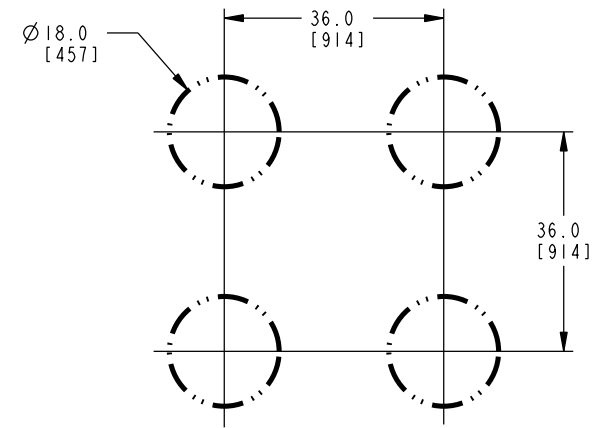
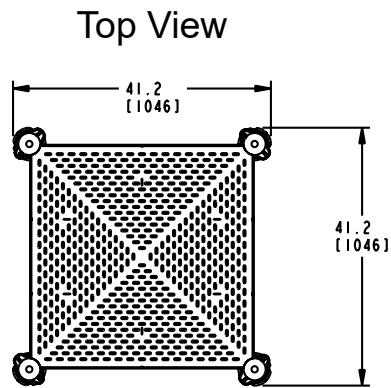
Assembly View

ICON KEY

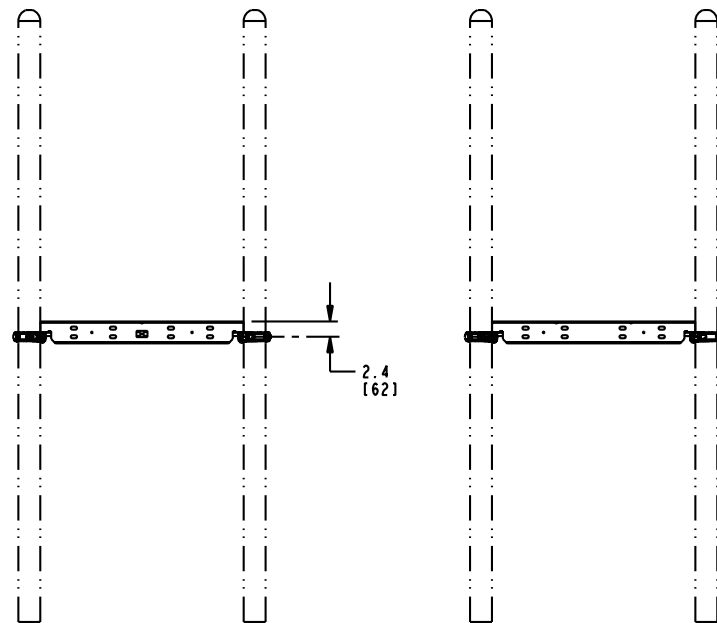
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	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

Installation Instructions

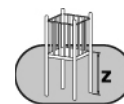
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram



Elevation Views
CH0616

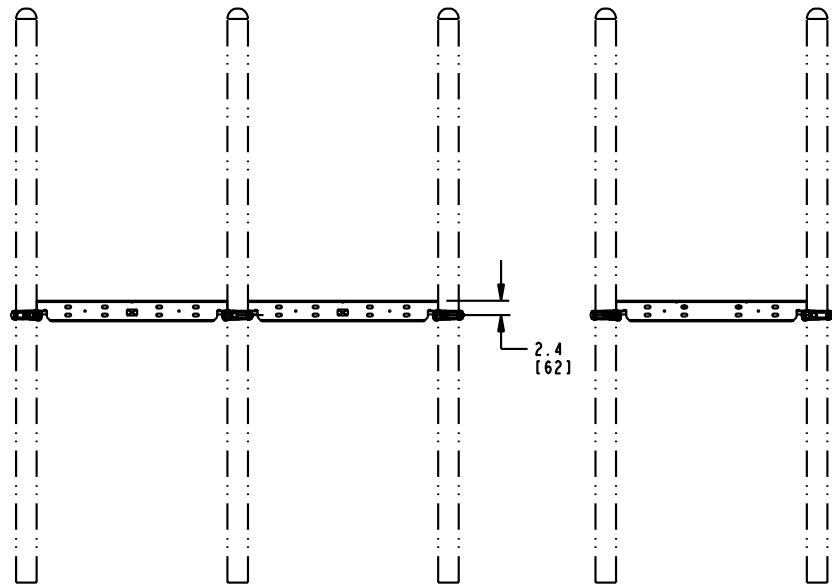
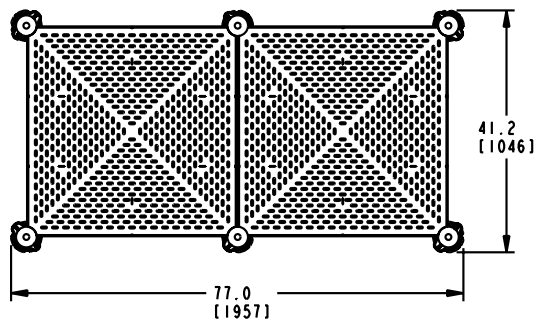


Equal to the height of the deck

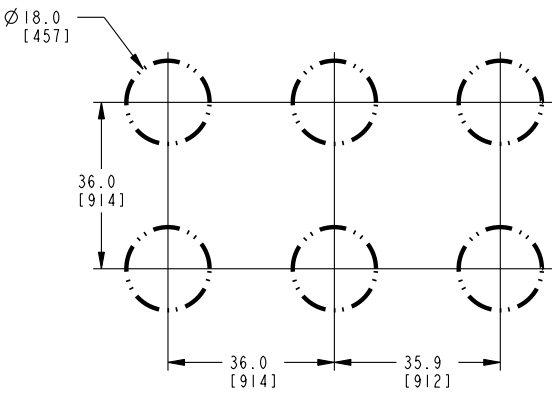
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

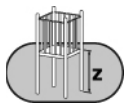
Top View



Elevation Views
CH0629



Footing Diagram

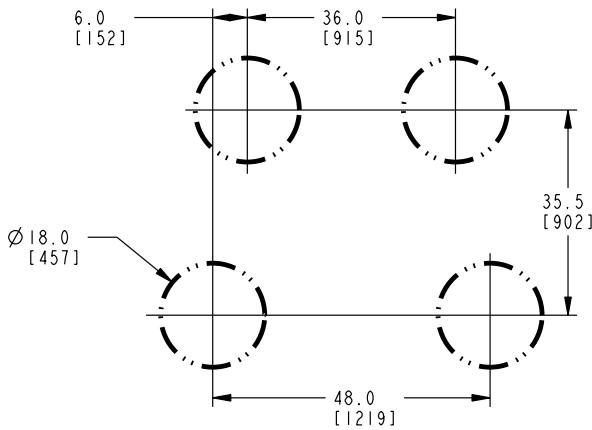
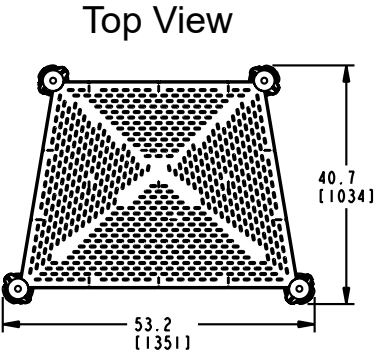


Equal to the height of the deck

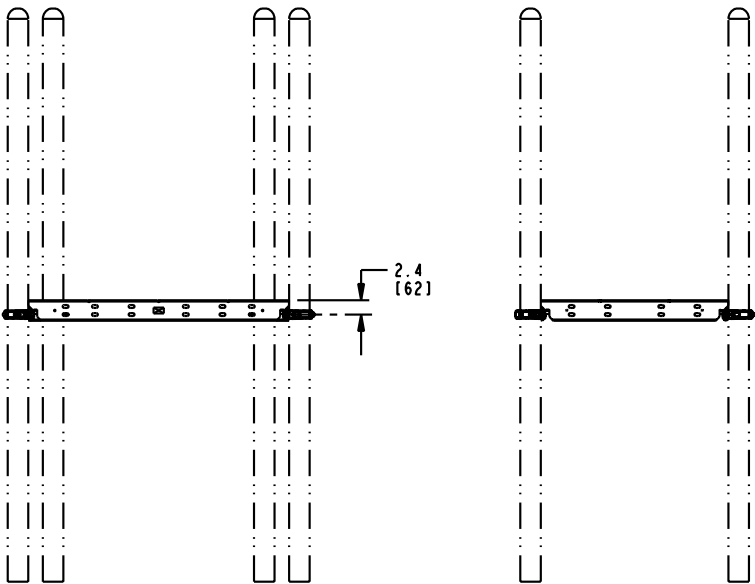


Installation Instructions

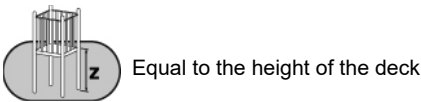
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram

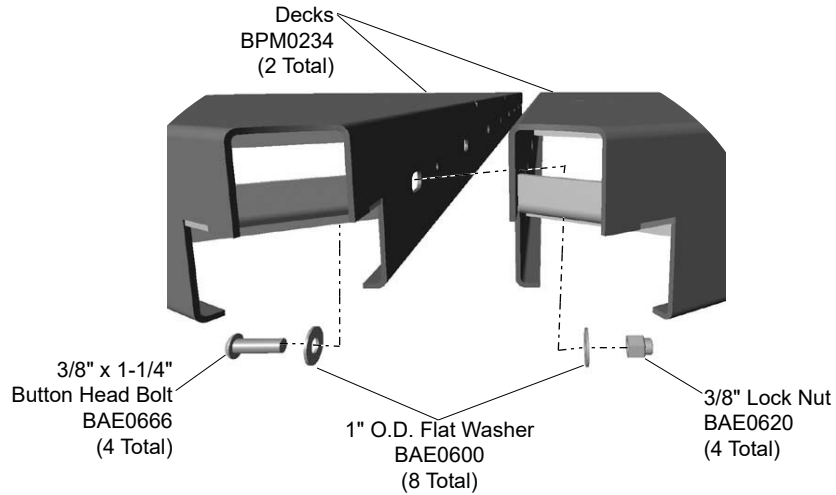


Elevation Views
CH0636

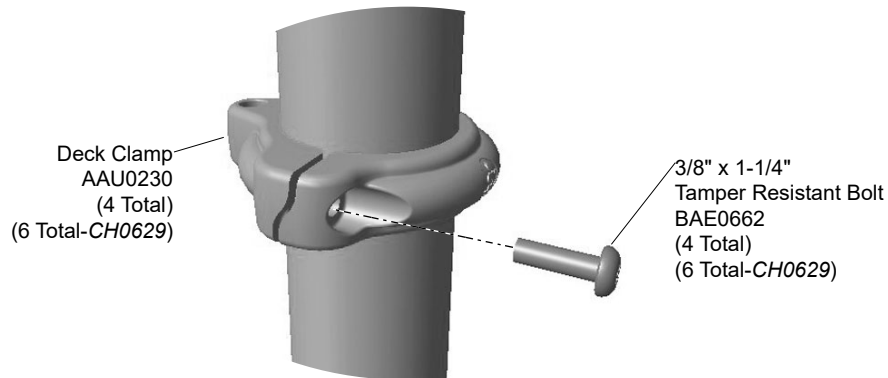


Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 6.

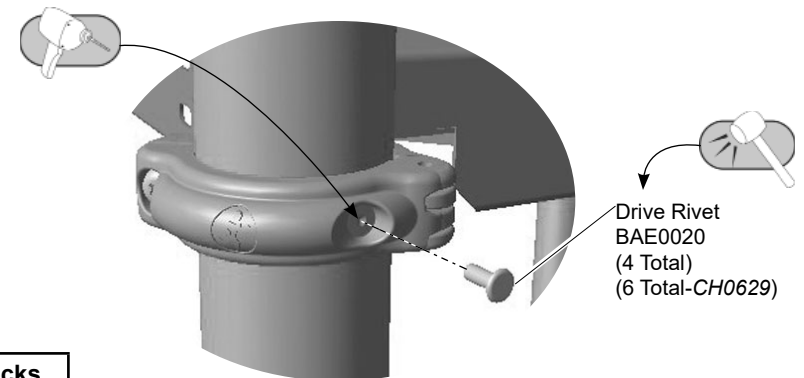
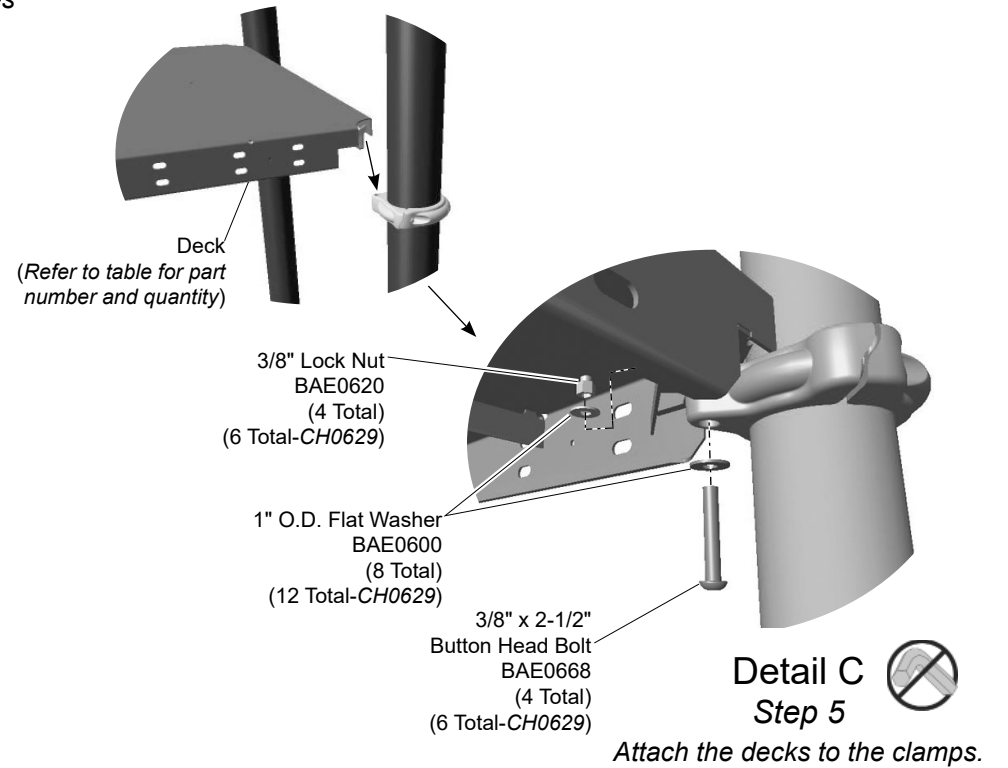


Detail A
Step 3
(Model CH0629 Only)
Attach the two decks together.



Detail B
Step 4
Attach the deck clamps to the support posts.

Model	Deck Part No.	No. of Decks
ZZCH0616	BPM0234	1
ZZCH0629	BPM0234	2
ZZCH0636	BPM0236	1



Detail D
Step 7
Secure the clamps to the support posts.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware. *Reference the master layout drawing at the beginning of the instruction booklet for location and heights of the decks.*

Step 3: (Model CH0629 Only) Attach the two decks together. **See Detail A.** Place both decks upside down on a flat surface. Match the long edges, align the holes, and attach as shown.

Step 4: Attach the deck clamps to the support posts. **See Detail B.** Position the clamps on the post at an appropriate height, and attach as shown. Ensure that all clamps are turned the same way, with deck connection inward.

Step 5: Attach the deck(s) to the clamps. **See Detail C.** Position the deck corners on top of the clamps and attach as shown.

Final Details.

Step 6: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 7: Install drive rivets. **See Detail D.** After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Bill of Materials

CH0616 - SQUARE COATED PERFORATED DECK

PART NO.	DESCRIPTION	QTY.
AAU0230	CLAMP - 3-1/2" DECK DIE CAST	4
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE0668	BOLT - 3/8"-16 x 2-1/2" BUTTON HEAD - SS	4
BPM0234	PLATFORM - CH SQUARE PERF	1

CH0636 - DOUBLE SLIDE PERFORATED DECK

PART NO.	DESCRIPTION	QTY.
AAU0230	CLAMP - 3-1/2" DECK DIE CAST	4
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BAE0668	BOLT - 3/8"-16 x 2-1/2" BUTTON HEAD - SS	4
BPM0236	PLATFORM - CH DOUBLE SLIDE PERF	1

CH0629 - LONG COATED PERFORATED DECK

PART NO.	DESCRIPTION	QTY.
AAU0230	CLAMP - 3-1/2" DECK DIE CAST	6
BAE0020	RIVET - 1/4" x 11/16" DRIVE	6
BAE0600	WASHER - 1" O.D. FLAT	20
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	10
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	6
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4
BAE0668	BOLT - 3/8"-16 x 2-1/2" BUTTON HEAD - SS	6
BPM0234	PLATFORM - CH SQUARE PERF	2



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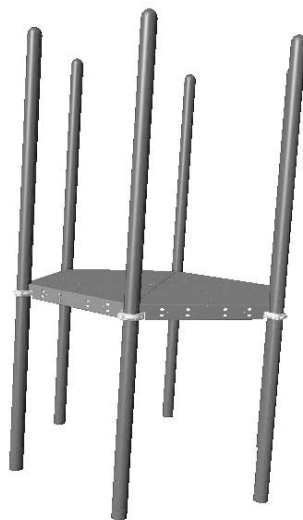


Installation Instructions

Challengers® Models CH0618 and CH0619
Hex and Half Hex Coated Perforated Deck



ZZCH0618
Half Hex Deck




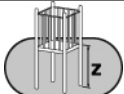

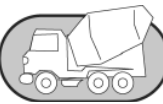
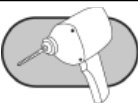

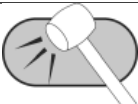
ZZCH0619
Hex Deck

Assembly View

Installation Preparation

Recommended Crew: Two (2) adults
Installation Time: 1.5 man-hours
Use Zone: Refer to Master Drawing
User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

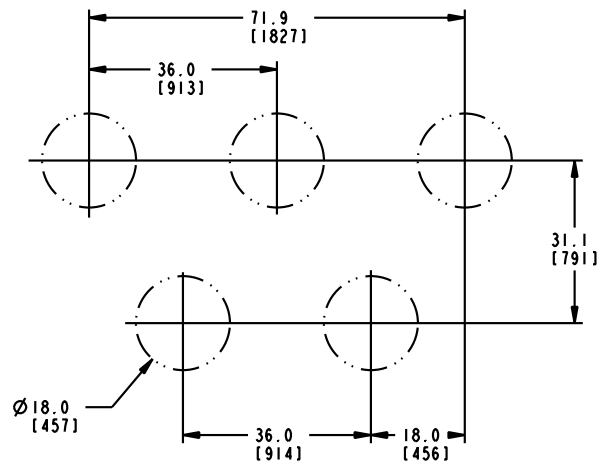
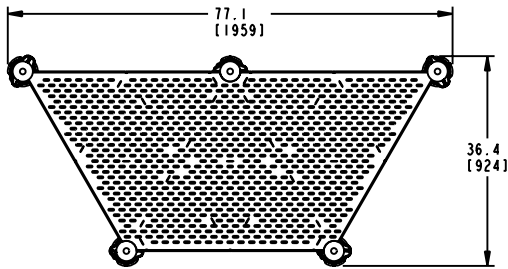
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

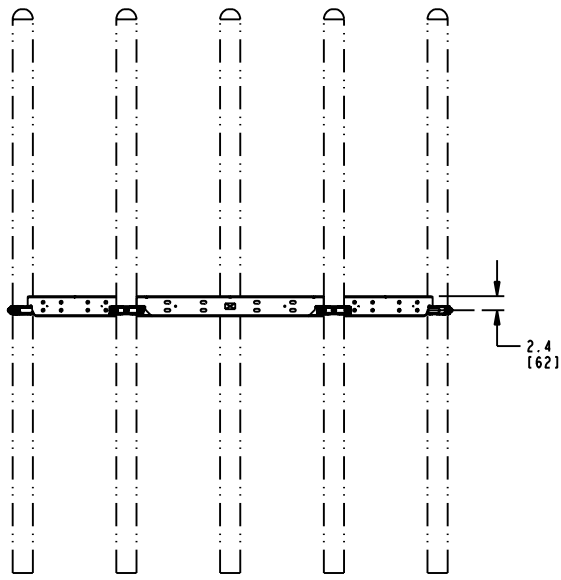
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

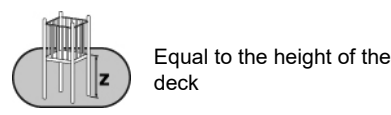
Top View



Footing Diagram

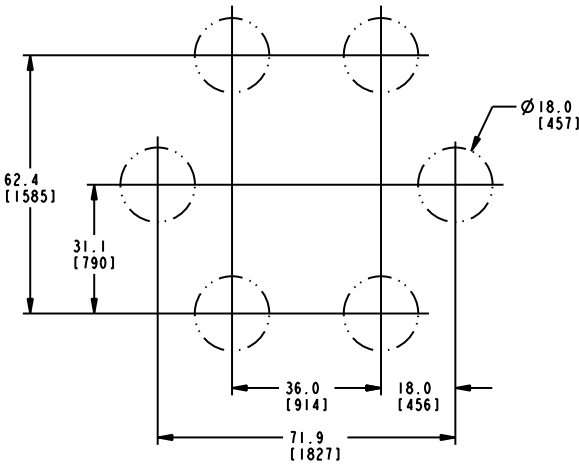
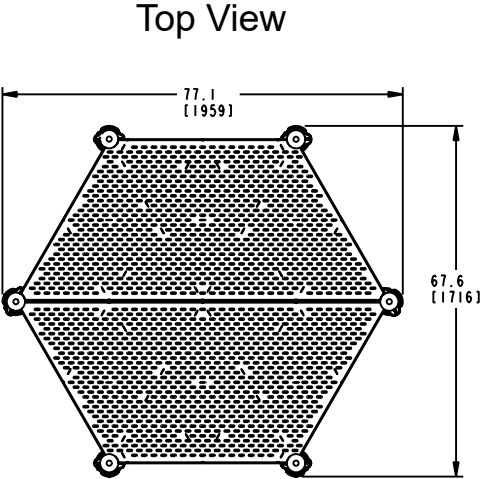


Elevation View
CH0618

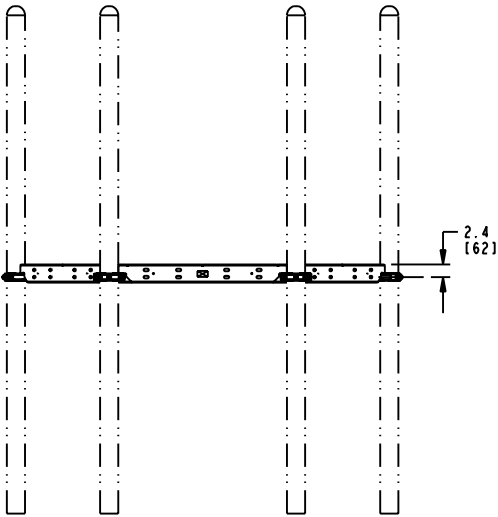


Installation Instructions

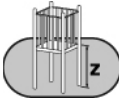
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram



Elevation View
CH0619

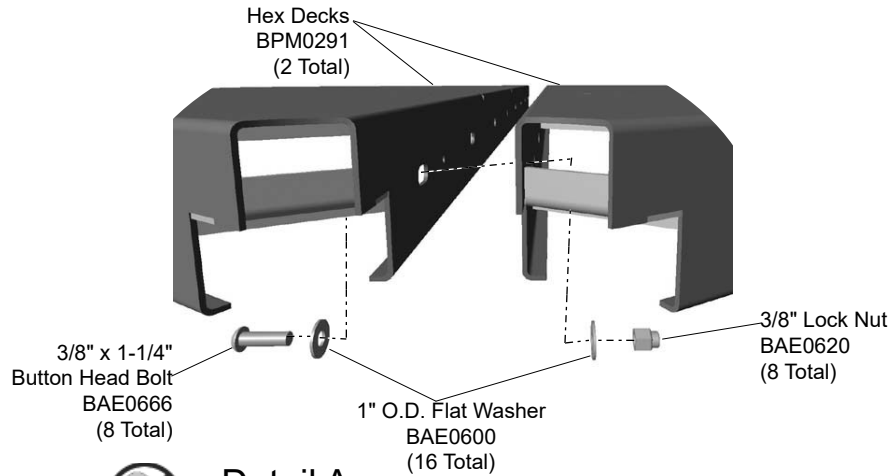


Equal to the height of the deck



Installation Instructions

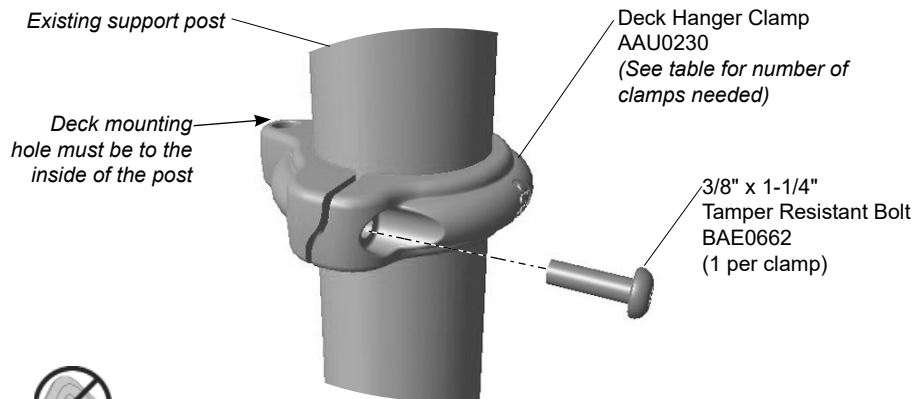
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



Detail A
Step 4

(Model CH0619 Only)

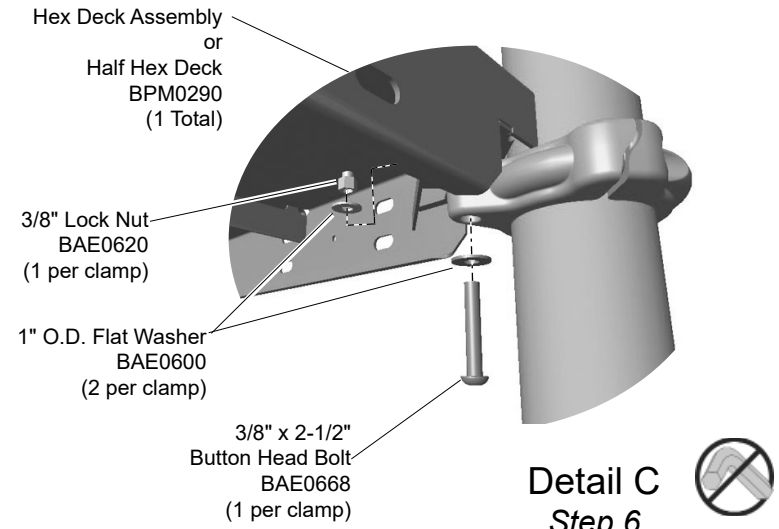
Attach the hex decks together.



Detail B
Step 5

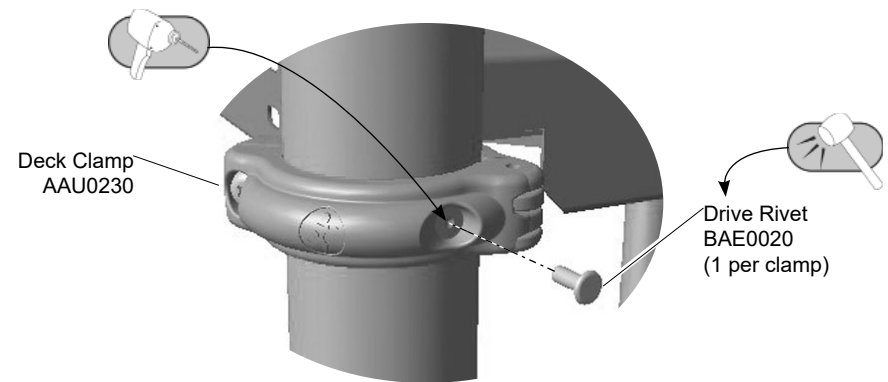
Attach the deck hanger clamps to the support posts.

Model	Deck Shape	Number of Clamps
ZZCH0618	Half Hex Deck	5
ZZCH0619	Hex Deck	6



Detail C
Step 6

Attach the deck to the deck hanger clamps.



Detail D
Step 8

Secure the clamps to the support posts.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Determine the location of your decks by referring to your master footing diagram.

Step 4: Connect the decks. **See Detail A.** If there is only one deck go to **Step 5.** Place both decks upside down on a flat surface. Match the long edges, align holes and attach as shown.

Step 5: Attach the clamps to the post. **See Detail B** and **Elevation View.** Position the deck clamps on the support posts so that the top of the clamp is 1-3/4 in. (43 mm) below the suggested deck height. Ensure deck mount portion of the clamp points inward from the post. Attach as shown.

Step 6: Attach the hex deck assembly or the half hex deck to the clamps. **See Detail C.** With adequate manpower, lift the deck onto the clamps, align the holes in the deck with those in the clamps and attach as shown.

Note: For the hex deck assembly each deck must be attached to (3) three clamps.

Final Details.

Step 7: Square and level the support posts and deck assembly. Check to ensure deck assembly is at the specified height above the surfacing material level. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 8: Install drive rivets. **See Detail D.** After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

CH0618 - HALF HEX COATED PERFORATED DECK

PART NO.	DESCRIPTION	QTY.
AAU0230	CLAMP - 3-1/2" DECK DIE CAST	5
BAE0020	RIVET - 1/4" x 11/16" DRIVE	5
BAE0600	WASHER - 1" O.D. FLAT	10
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	5
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	5
BAE0668	BOLT - 3/8"-16 x 2-1/2" BUTTON HEAD - SS	5
BPM0290	PLATFORM - CH HALF HEX PERF	1

CH0619 - HEX COATED PERFORATED DECK

PART NO.	DESCRIPTION	QTY.
AAU0230	CLAMP - 3-1/2" DECK DIE CAST	6
BAE0020	RIVET - 1/4" x 11/16" DRIVE	6
BAE0600	WASHER - 1" O.D. FLAT	28
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	14
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	6
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	8
BAE0668	BOLT - 3/8"-16 x 2-1/2" BUTTON HEAD - SS	6
BPM0291	PLATFORM - CH HEX PERF	2





Assembly View (representative model)

Installation Instructions

Challengers® Models CH0684 and CH0684S

Nuvo™ Transfer Station


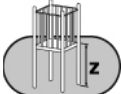

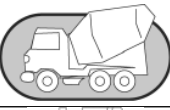
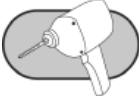


48 in. (1219 mm) Deck

In-Ground and Surface Mount

Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time (In-ground): 4 man-hours
 Installation Time (Surface Mount): 2 man-hours
 Concrete Required: 0.12 cubic yard (0,08 cubic meters)
 Use Zone: Refer to the master layout drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

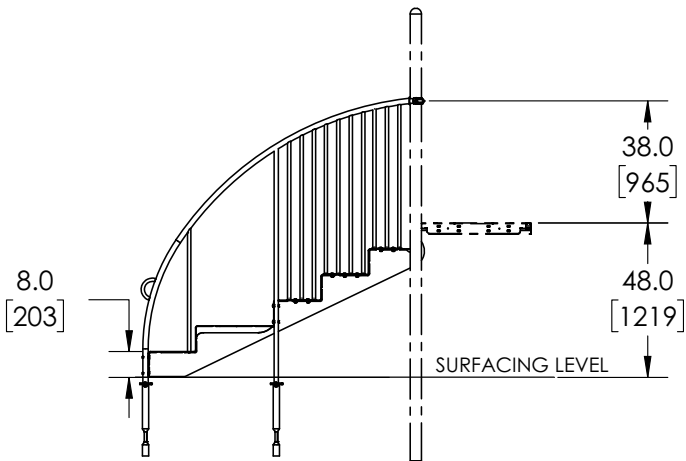
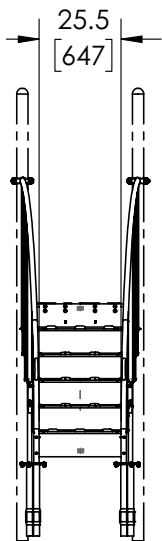
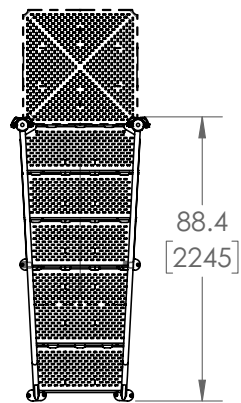
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

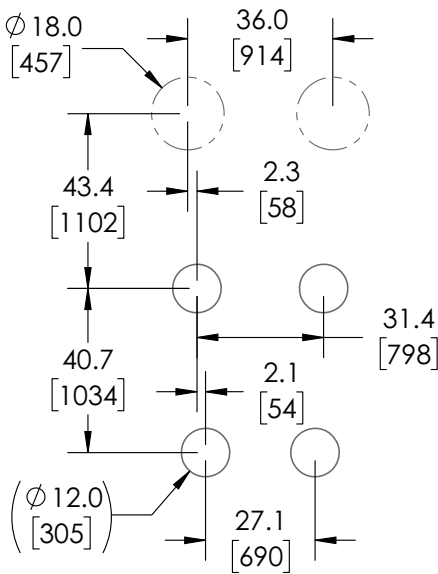
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

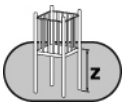
Top View



Elevation Views
CH0684



Footing Diagram
(Both Models)



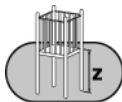
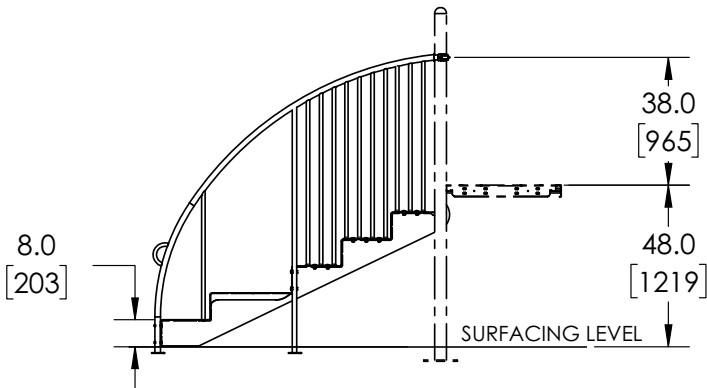
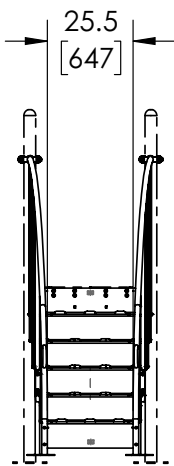
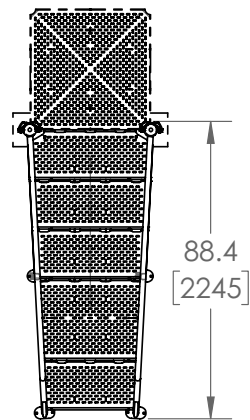
Height of the deck



Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View

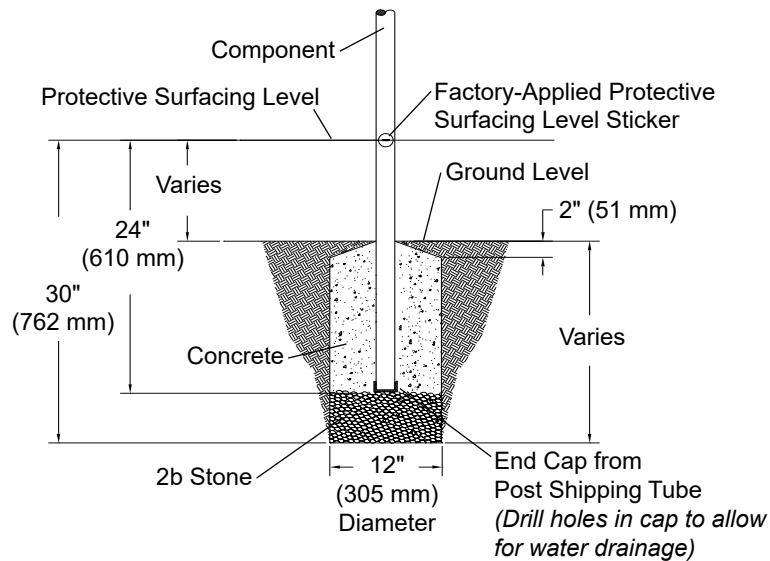


Height of the deck

Elevation Views
CH0684S



Installation Instructions



Component Footing Detail (ASTM/CSA)

FOOTING NOTES

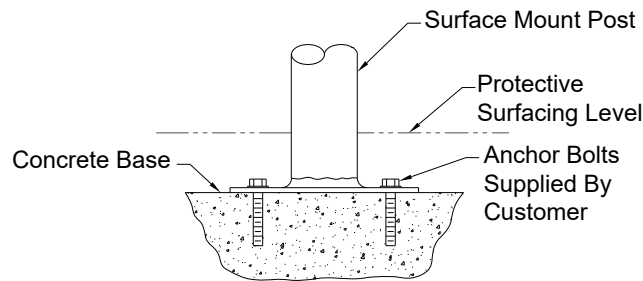
- Component footing depth equals 30 in. (762 mm) less the depth of the protective surfacing material. The post is designed to have 12" (305 mm) in concrete.

Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 18 in. (457 mm).

- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

Installation Instructions

SURFACE MOUNT FOOTING DIAGRAMS: SUPPORT POSTS AND COMPONENTS



Surface Mount Footing Detail

DEFINITIONS

- **Concrete Pier:** A pier type surface mount installation is defined as a footing hole that has been excavated and poured with concrete. Concrete should be flush to the top surface of excavated hole. Equipment would then be secured to this concrete footing that has been properly cured.
- **Concrete Slab:** Existing concrete slab type installation is defined as equipment being secured to an existing concrete pad or slab. As an example, this pad could be in the form of an existing concrete parking lot.

FOOTING NOTES: PIER TYPE SURFACE MOUNT

- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Footing size may vary due to local soil and weather conditions.
- Base of footing must be below frost line.

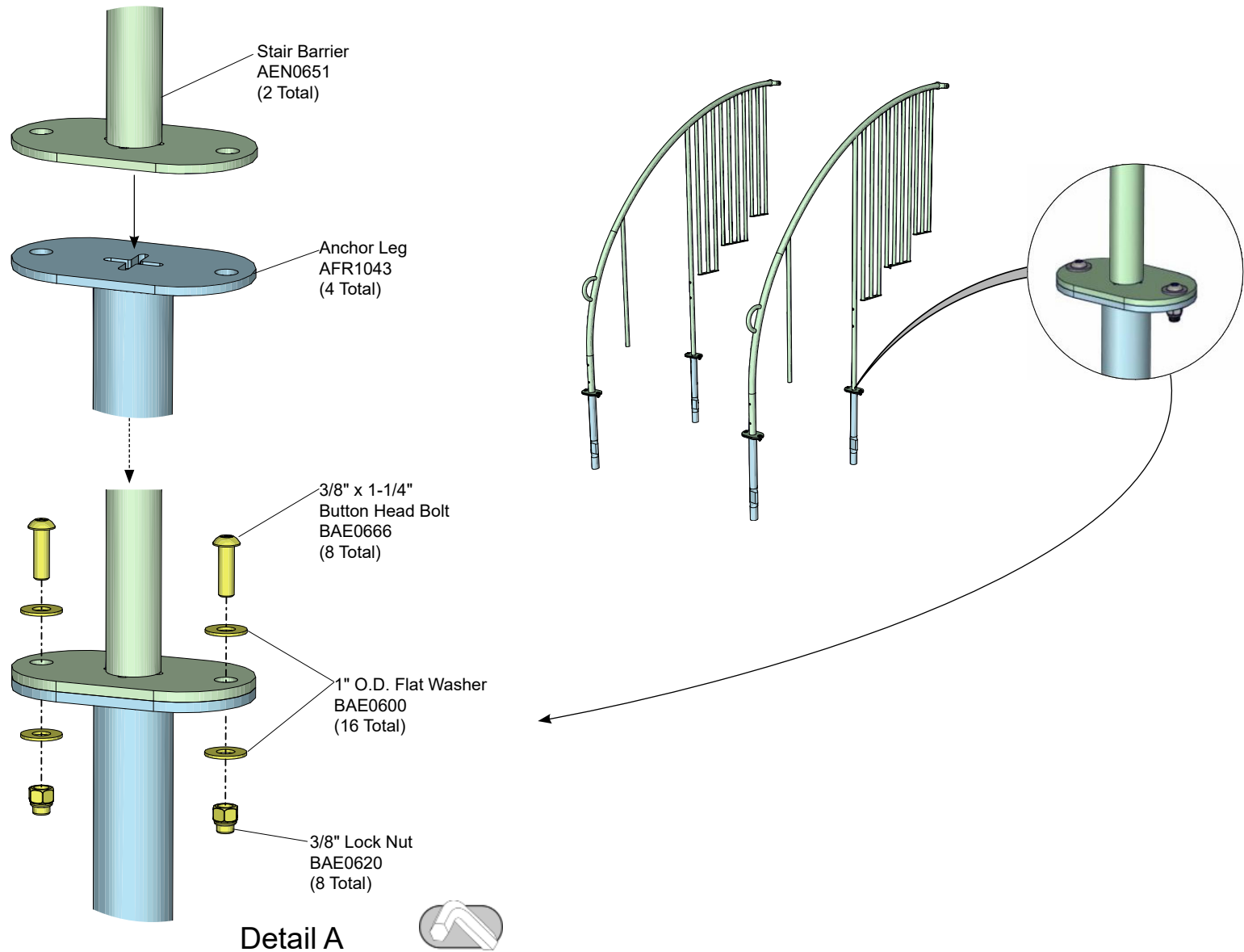
FOOTING NOTES: EXISTING CONCRETE SLAB TYPE SURFACE MOUNT

- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- Support posts and all attaching decks and play components must be plumb and level.

IMPORTANT NOTE: Surface mount hardware is not supplied. The customer is responsible for the concrete base and providing surface mount hardware as specified by a registered structural engineer for each specific project application.

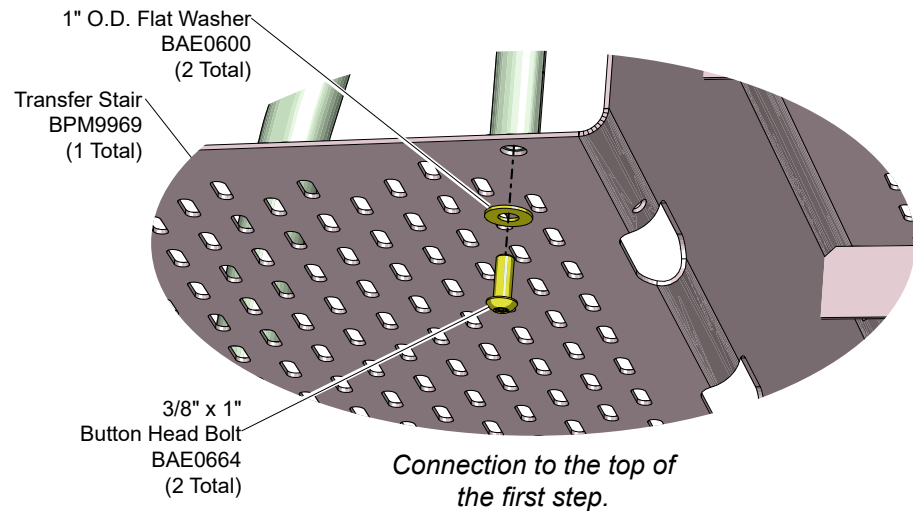
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 11.

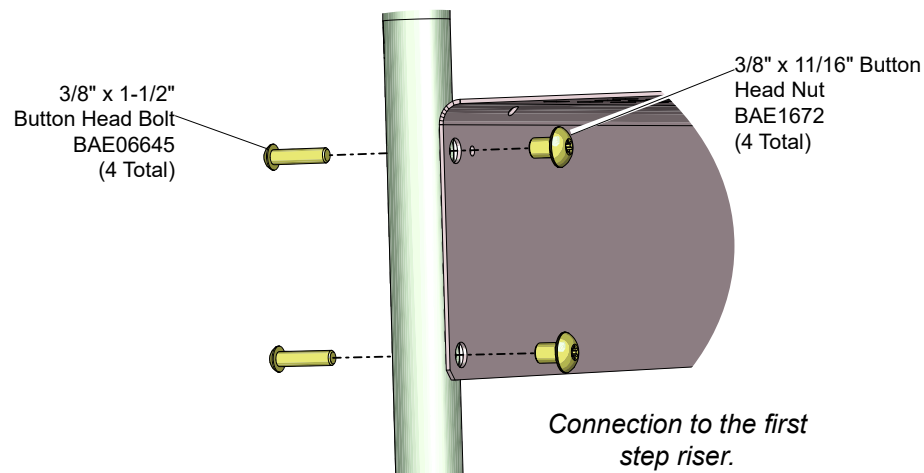


Step 4 (In-Ground Model only)
Attach the anchor legs to the stair barriers.

Installation Instructions

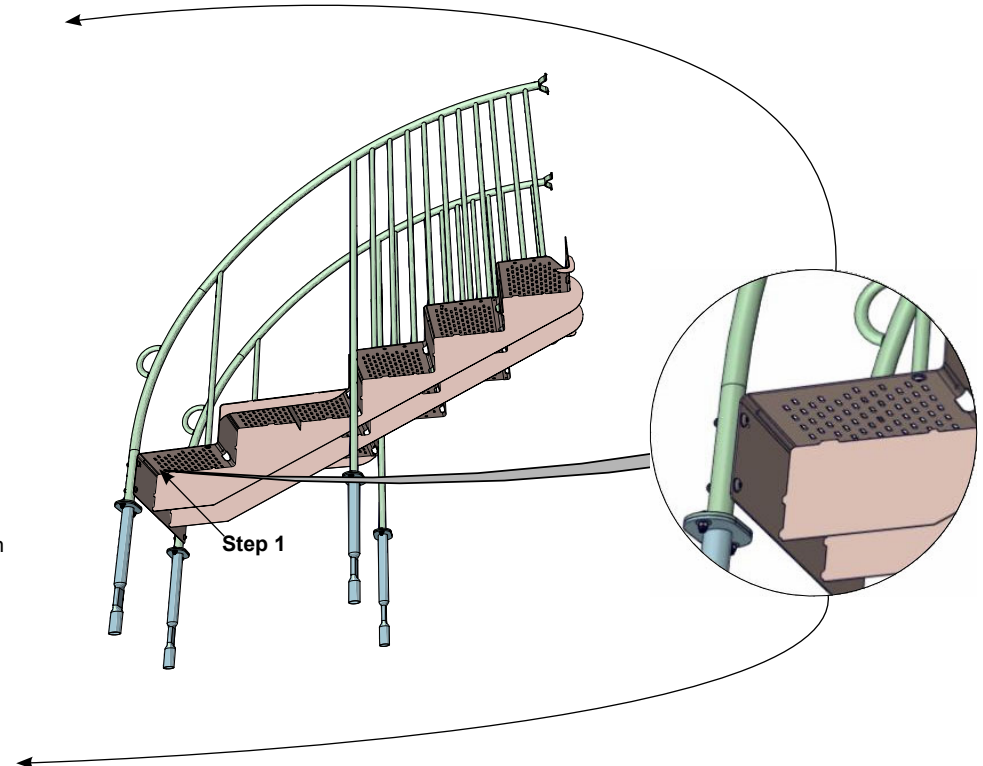


All views are from
underneath the stair.

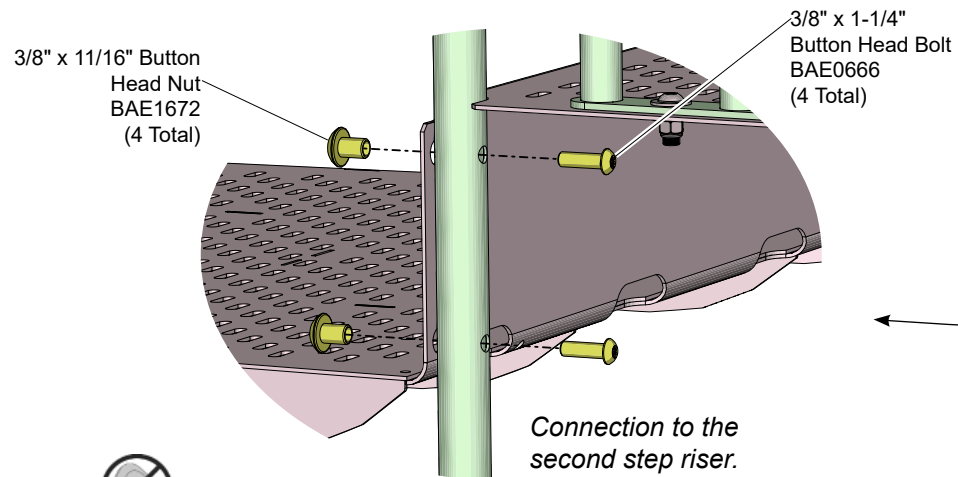
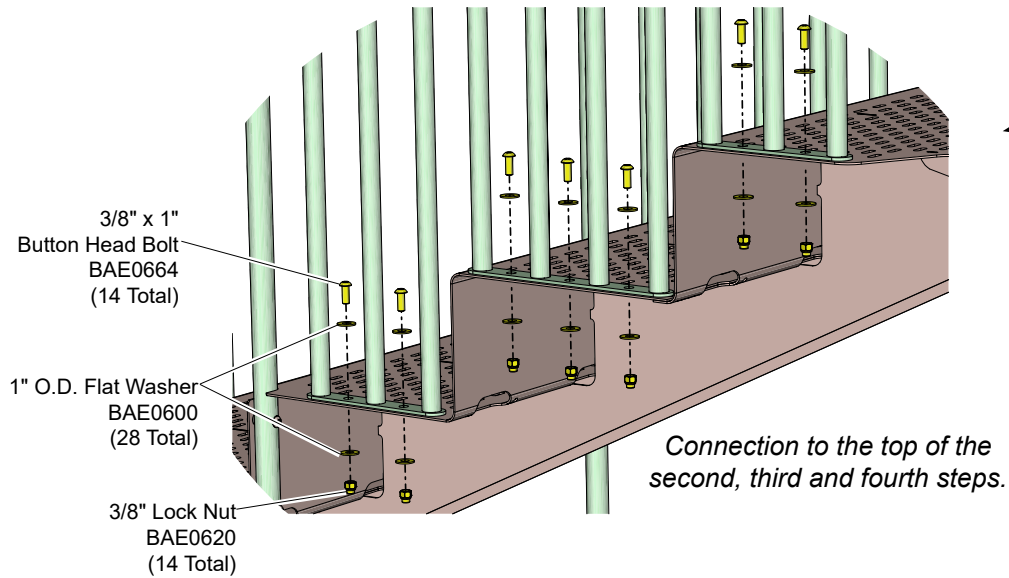


Detail B Step 5

Attach the stair barriers to the first step on the transfer stair.

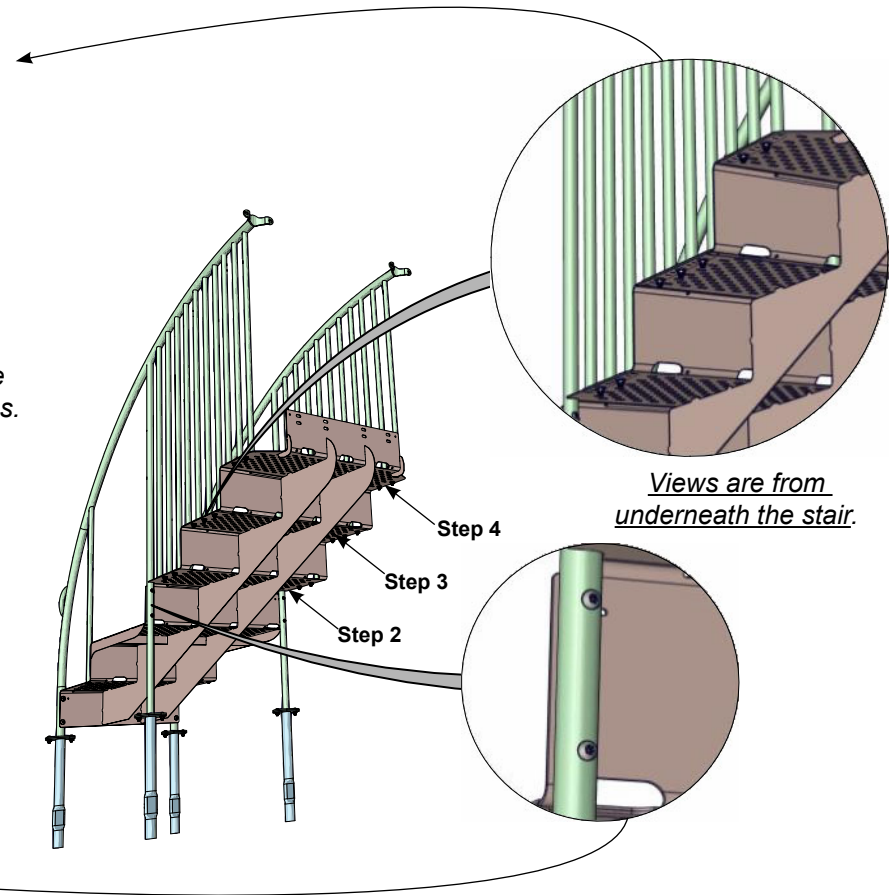


Installation Instructions

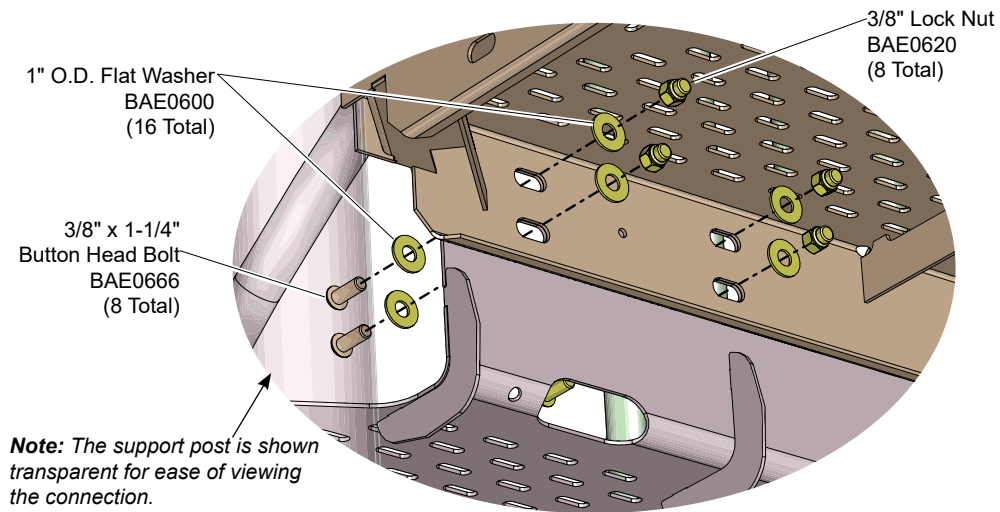


Detail C Step 6

*Attach the stair barriers to the second, third and
fourth steps on the transfer stair.*

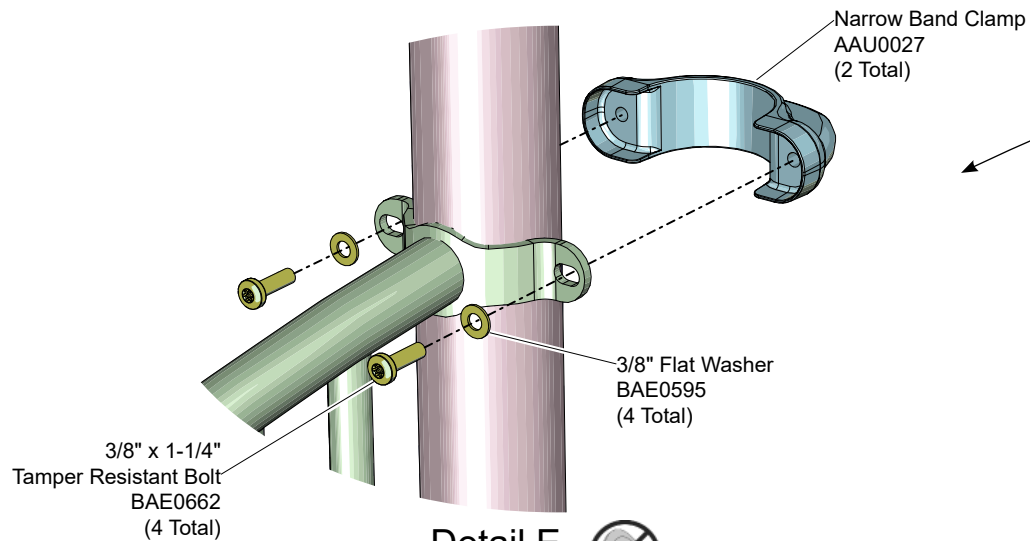
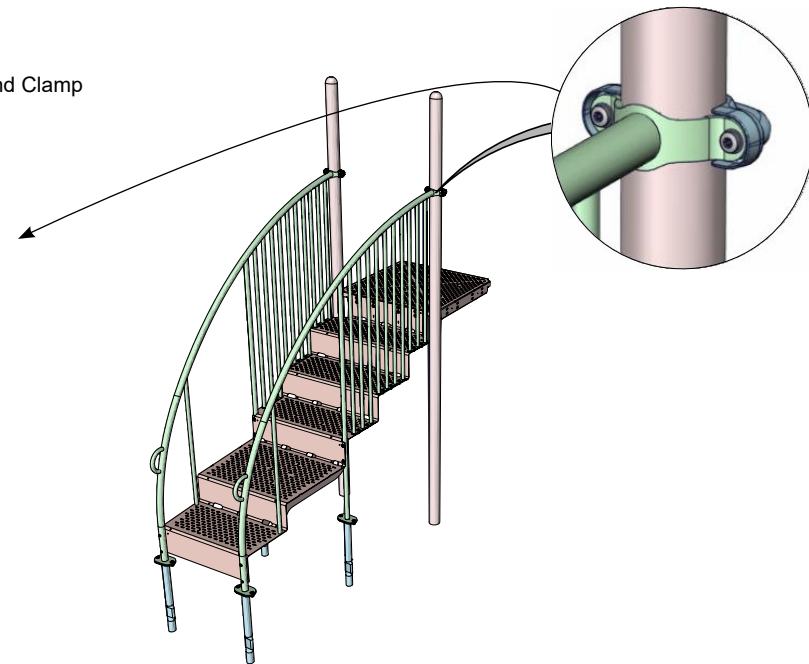
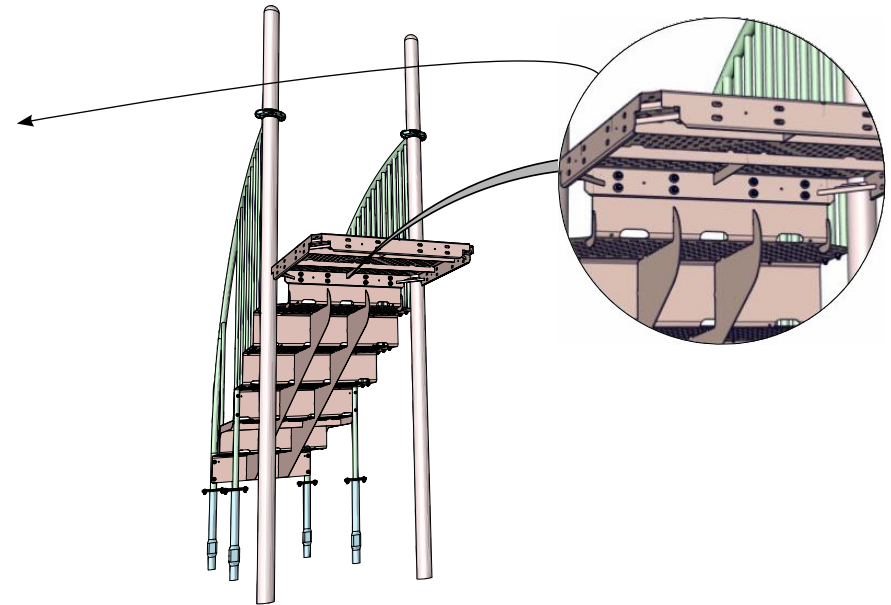


Installation Instructions



Detail D
Step 7

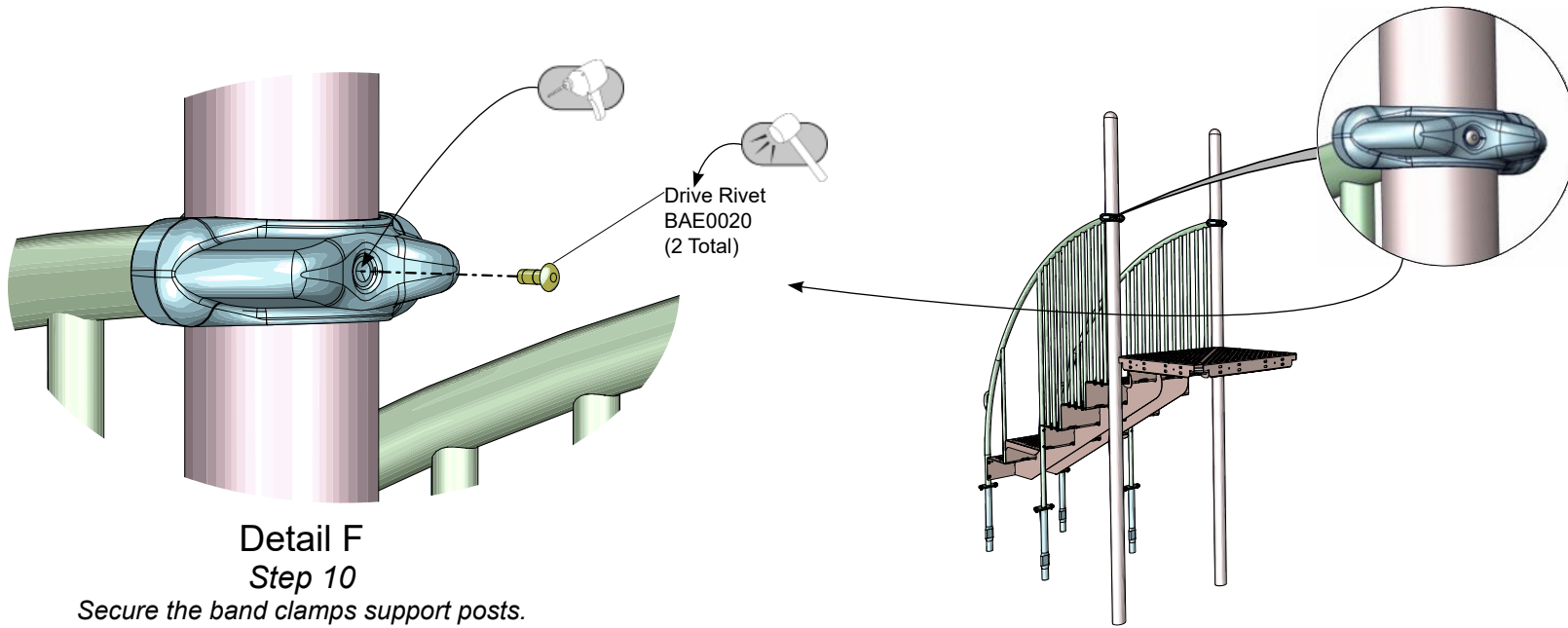
Attach the transfer stair to the existing deck.



Detail E
Step 8

Attach the stair barriers to the existing support posts.

Installation Instructions



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate / prepare footings as shown in the **Component Post/Surface Mount Footing Details** in the *Challenger Guidelines* at the beginning of this instruction booklet and on pages 4 and 5 of this installation document.

Step 4: Attach the anchor legs to the stair barriers (*In-Ground Model only*). See **Detail A**. Position the mounting plate on each anchor leg against a mounting plate on the stair barriers and attach as shown. Fully tighten the connections according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 5: Attach the stair barriers to the first step on the transfer stair. See **Detail B**. Position the stair barriers against the sides of the transfer stair and attach the lower end of the barriers to the top and step riser of the first step as shown.

Step 6: Attach the stair barriers to the second, third and fourth steps on the transfer stair. See **Detail C**. Attach the barriers to the top of the second, third and fourth steps and the second step riser as shown.

Step 7: Attach the transfer stair to the existing deck. See **Detail D**. Position the top of the transfer stair against the deck, with barrier clamp bands around the support posts, and attach as shown.

Step 8: Attach the stair barriers to the existing support posts. See **Detail E**. Attach as shown.

Final Details.

Step 9: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

In-Ground: Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Surface Mount: Bolt down all surface mount supports in accordance with specifications provided by your registered structural engineer.

Important Note: Surface mount hardware is not supplied. Customer is responsible for concrete base and for providing surface mount hardware as specified by a registered structural engineer for each specific project application.

Step 10: Install drive rivets. See **Detail F**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

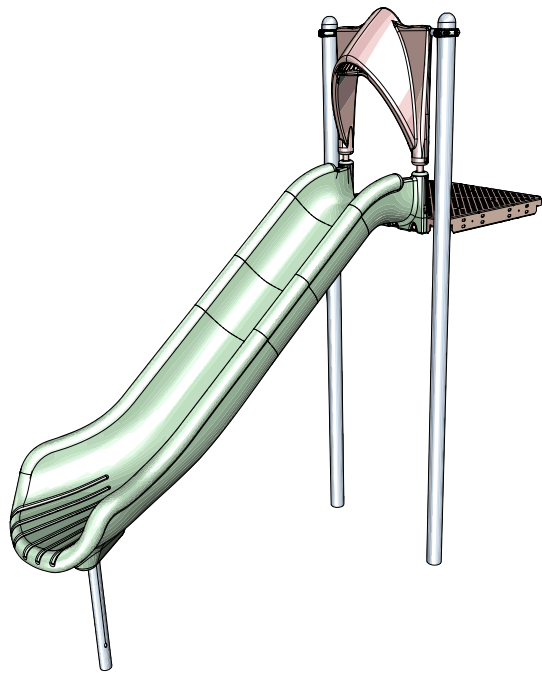
CH0684 - NUVO™ TRANSFER STATION 48 in. (1219 mm) DECK

PART NO.	DESCRIPTION	QTY.
AAU0027	CLAMP - 3.50" NARROW ALUMINUM BAND	2
AEN0651	BARRIER - 48" NUVO TRANSFER STATION (CH)	2
AFR1043	FRAME- PLAY SIMPLE LEG(ROUND)	4
BAE0020	RIVET - 1/4" x 11/16" ALUMINUM DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0600	WASHER - 1" O.D. FLAT	62
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	30
BAE0662	BOLT - 3/8"-16 x 1.25" TAMP RESISTANT w/TORX DRV	4
BAE0664	BOLT - 3/8"-16 x 1.00" BUTTON HEAD - SS	16
BAE0666	BOLT - 3/8"-16 x 1.25" BUTTON HEAD - SS	20
BAE1672	NUT - 3/8"-16 x 11/16" BUTTON HEAD	8
BAE06645	BOLT - 3/8"-16 x 1.50" BUTTON HEAD - SS	4
BPM9969	STAIR - NUVO TRANSFER - 48" - (CH)	1

CH0684S - NUVO™ TRANSFER STATION 48 in. (1219 mm) DECK SM

PART NO.	DESCRIPTION	QTY.
AAU0027	CLAMP - 3.50" NARROW ALUMINUM BAND	2
AEN0651	BARRIER - 48" NUVO TRANSFER STATION (CH)	2
BAE0020	RIVET - 1/4" x 11/16" ALUMINUM DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0600	WASHER - 1" O.D. FLAT	46
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	22
BAE0662	BOLT - 3/8"-16 x 1.25" TAMP RESISTANT w/TORX DRV	4
BAE0664	BOLT - 3/8"-16 x 1.00" BUTTON HEAD - SS	16
BAE0666	BOLT - 3/8"-16 x 1.25" BUTTON HEAD - SS	12
BAE1672	NUT - 3/8"-16 x 11/16" BUTTON HEAD	8
BAE06645	BOLT - 3/8"-16 x 1.50" BUTTON HEAD - SS	4
BPM9969	STAIR - NUVO TRANSFER - 48" - (CH)	1





Assembly View (representative model)

Model	Deck Height
CH3127	36" (915 mm)
CH3126	48" (1220 mm)
CH2658	60" (1525 mm)
CH2696	72" (1830 mm)

Installation Instructions




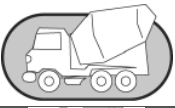
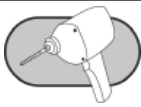

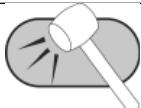
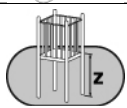
Challengers®

Models CH2658, CH2696, CH3126-CH3127
36"-72" (914-1829 mm) Glide Slides

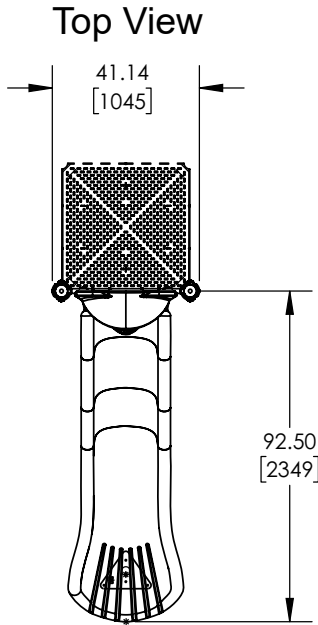
Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 1.5 man-hours
 Concrete Required: 0.03 cubic yard (0.02 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

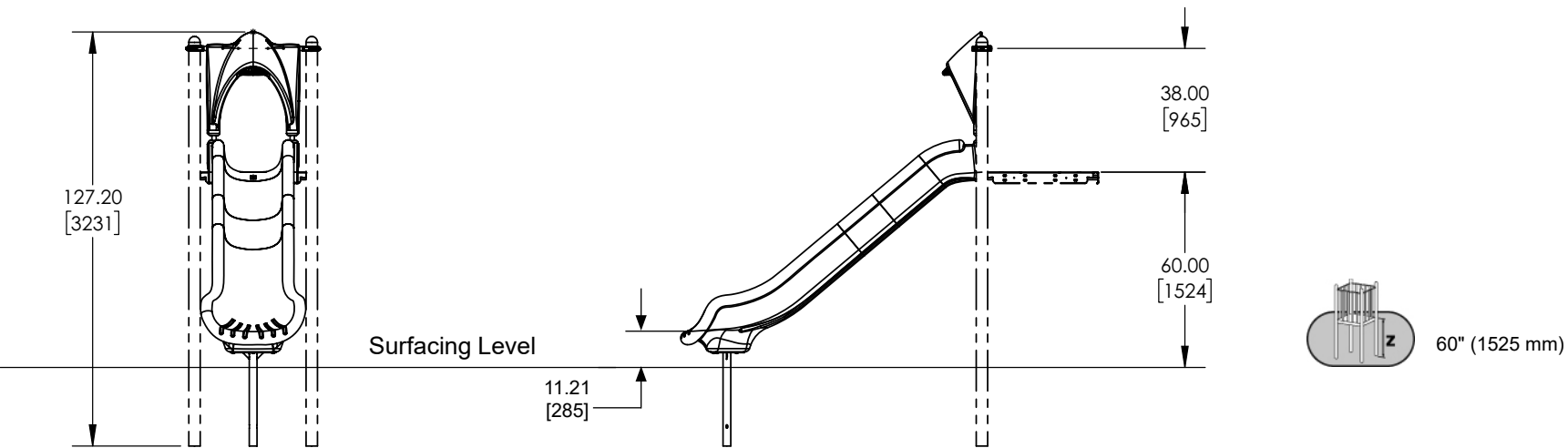
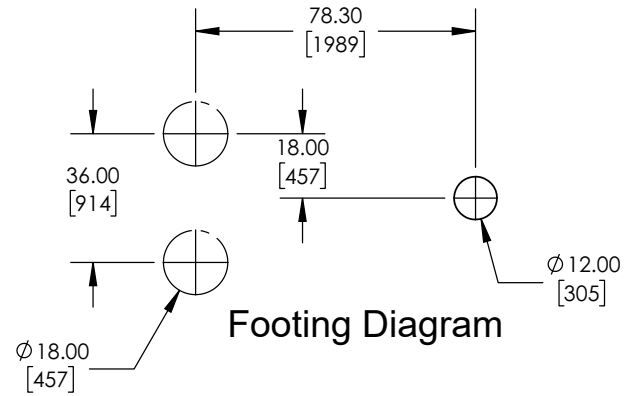
ICON KEY

	Fully Tighten Hardware		Add 1 Drop of Thread Locking Adhesive
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		Critical Fall Height

Installation Instructions



KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



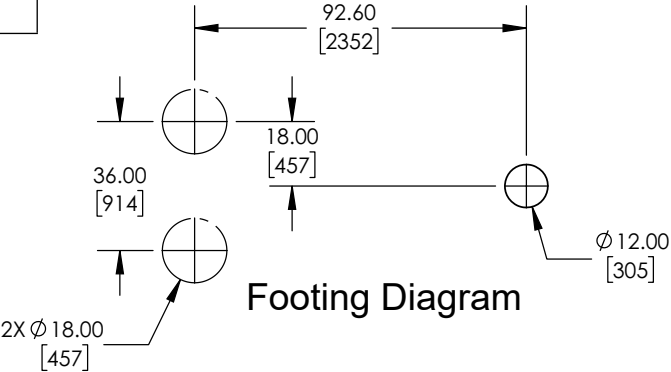
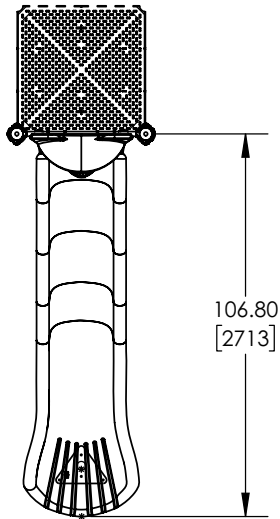
Elevation Views
CH2658



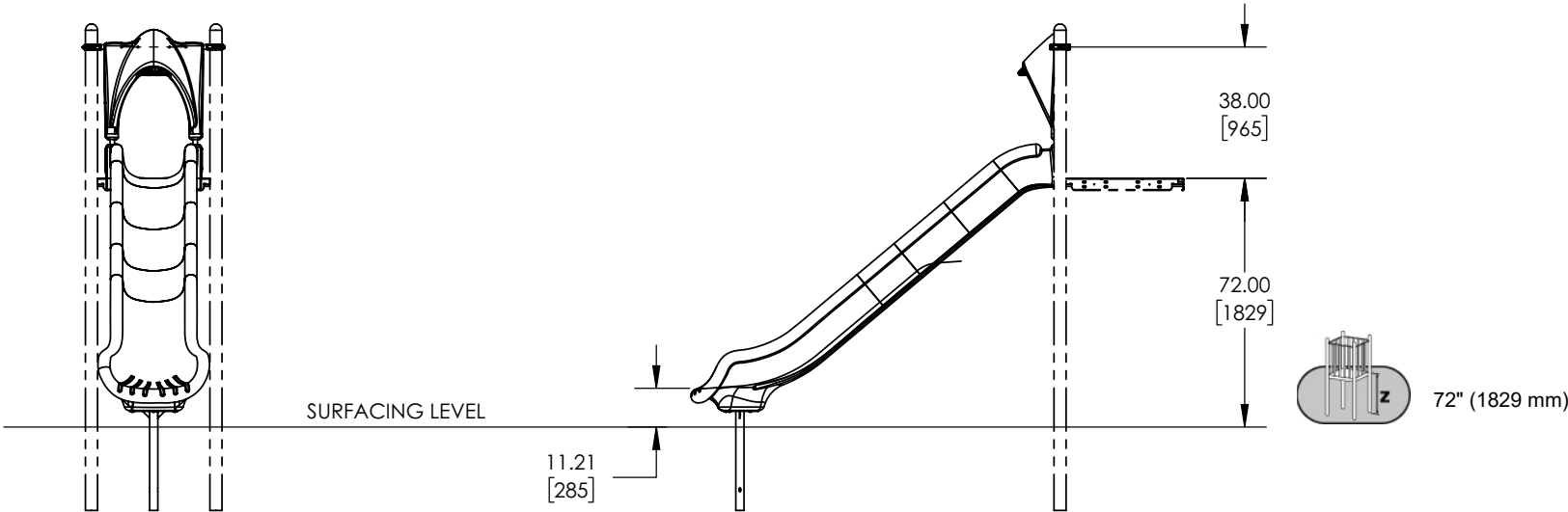
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View



Footings Diagram



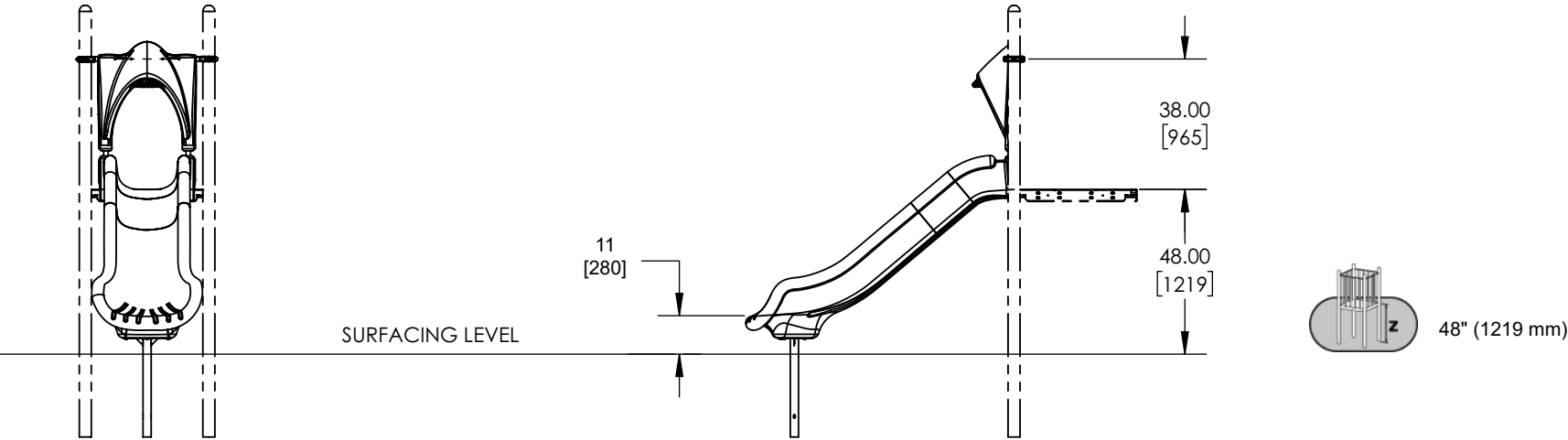
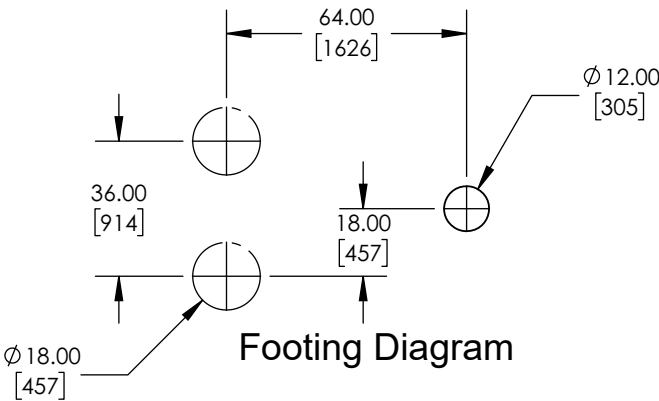
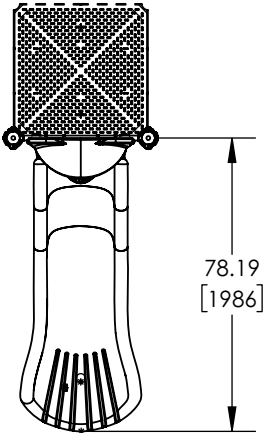
Elevation Views
CH2696



Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View

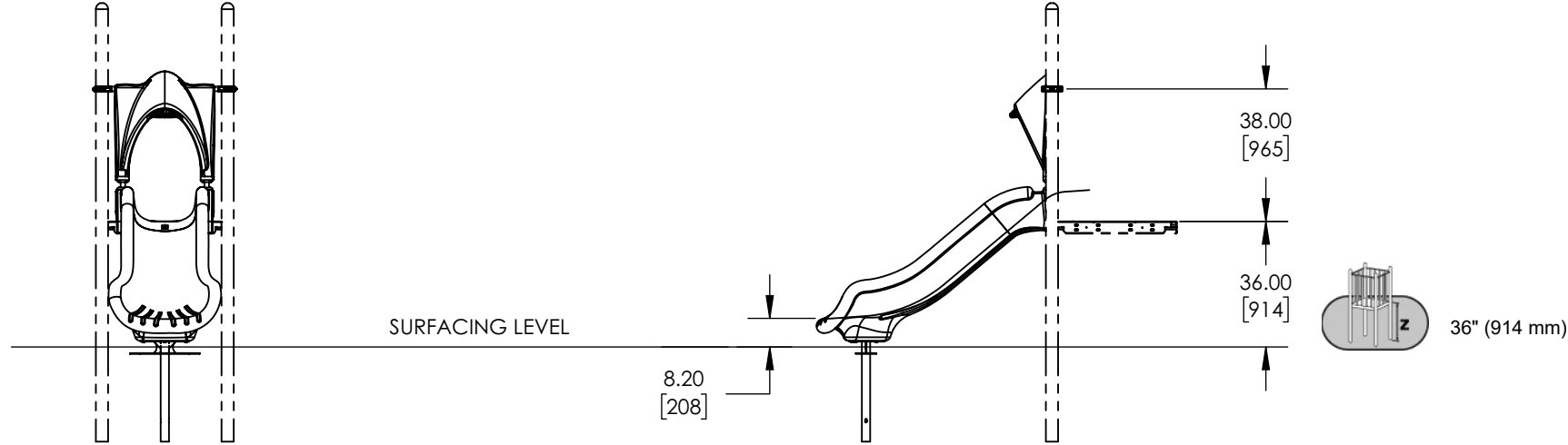
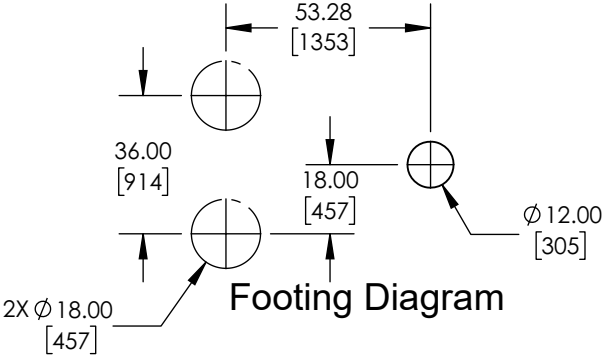
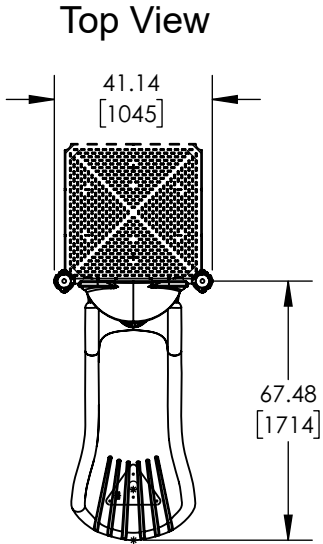


Elevation Views
CH3126



Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

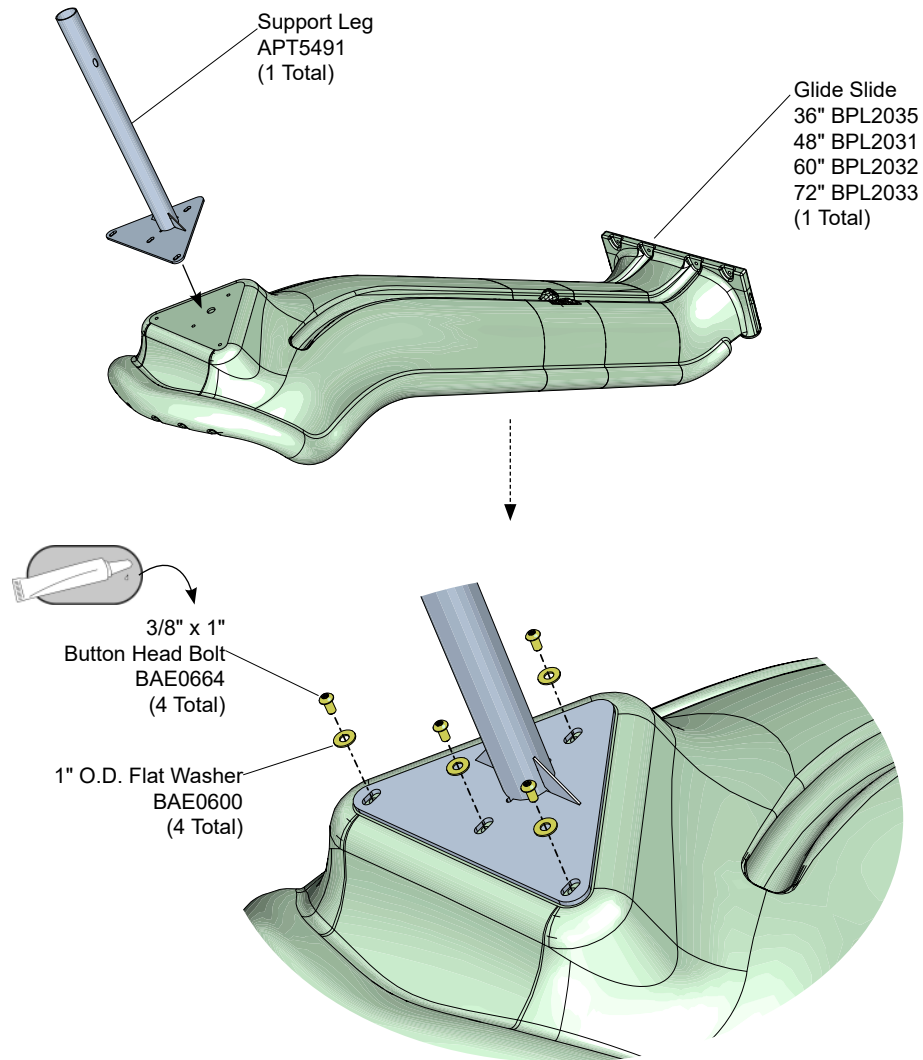


Elevation Views
CH3127



Installation Instructions

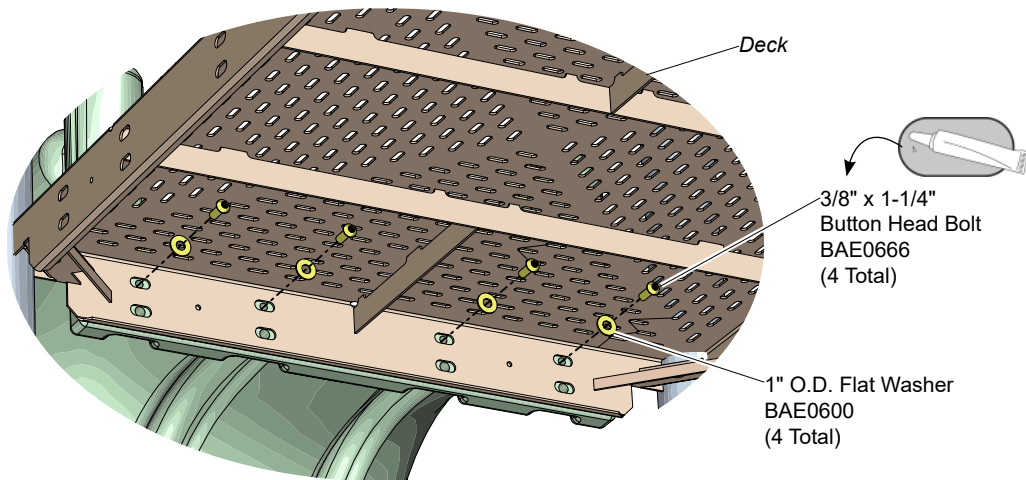
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 11.



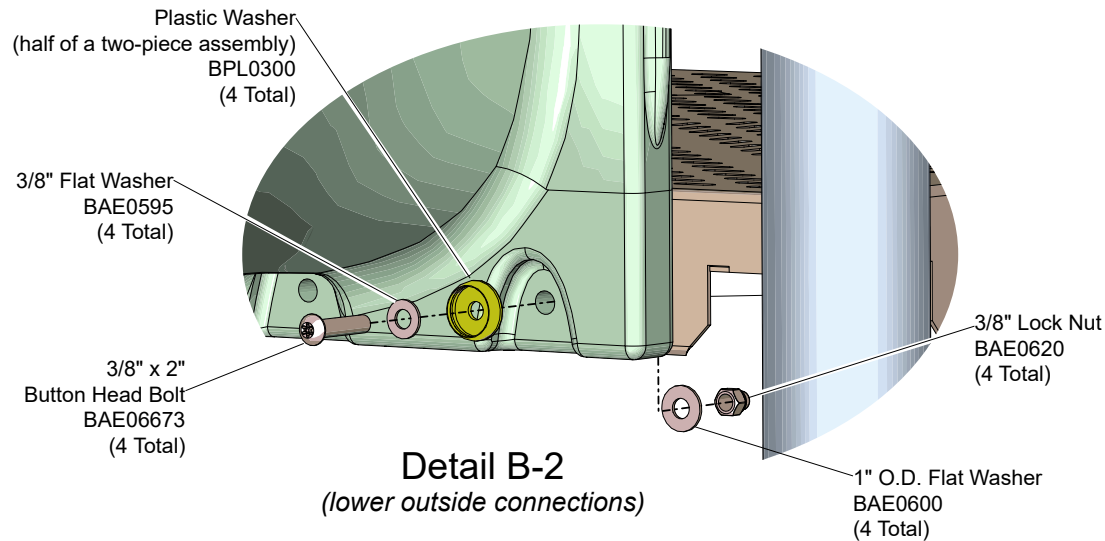
Detail A Step 4

Attach the support leg to the slide.

Installation Instructions



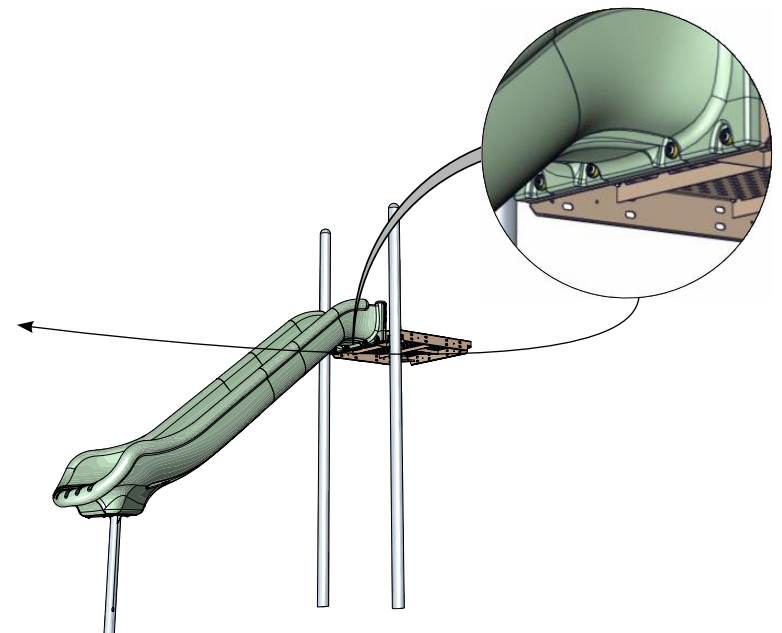
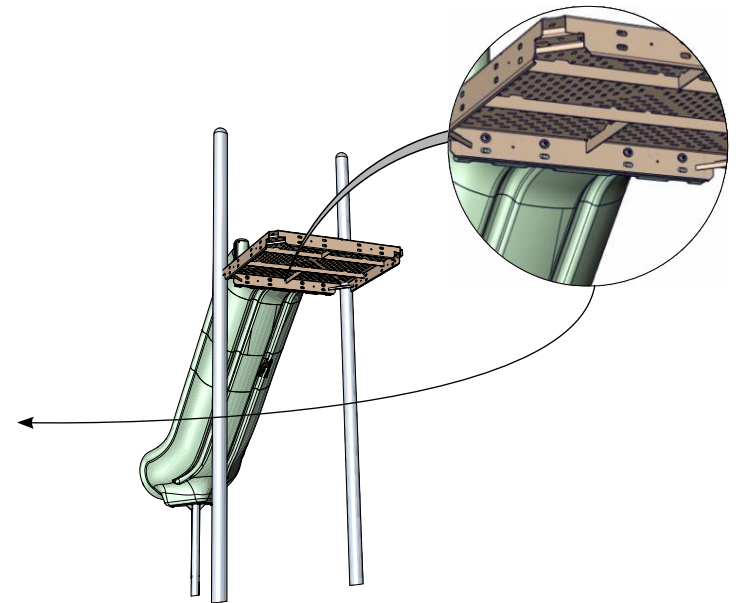
Detail B-1
(upper inside connections)



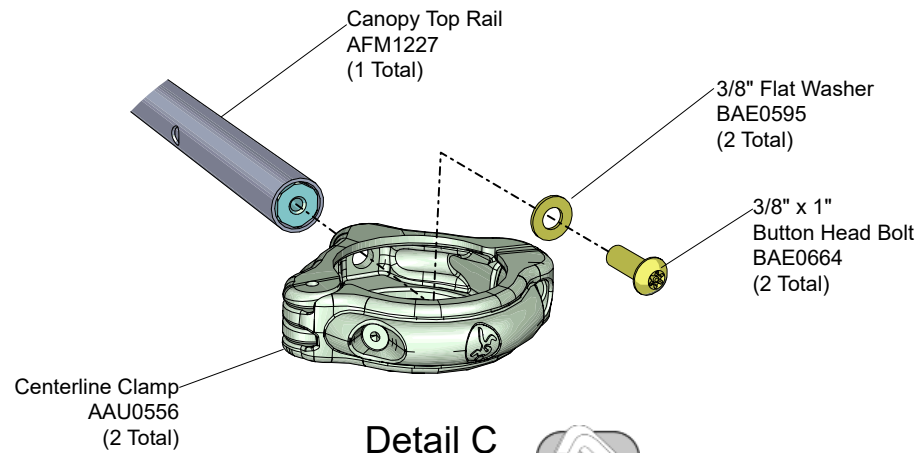
Detail B-2
(lower outside connections)



Details B-1 and B-2
Step 5
Attach the slide to the deck.



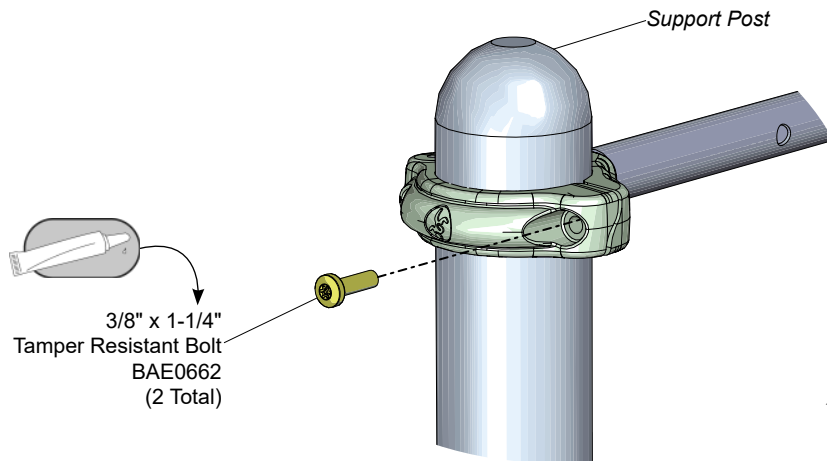
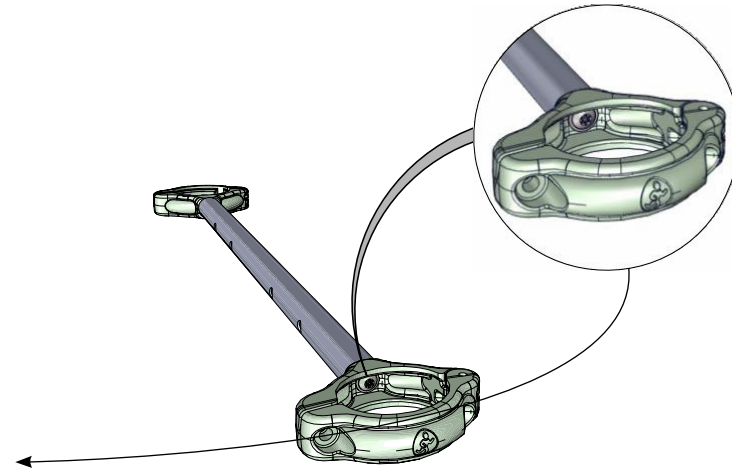
Installation Instructions



Detail C
Step 6



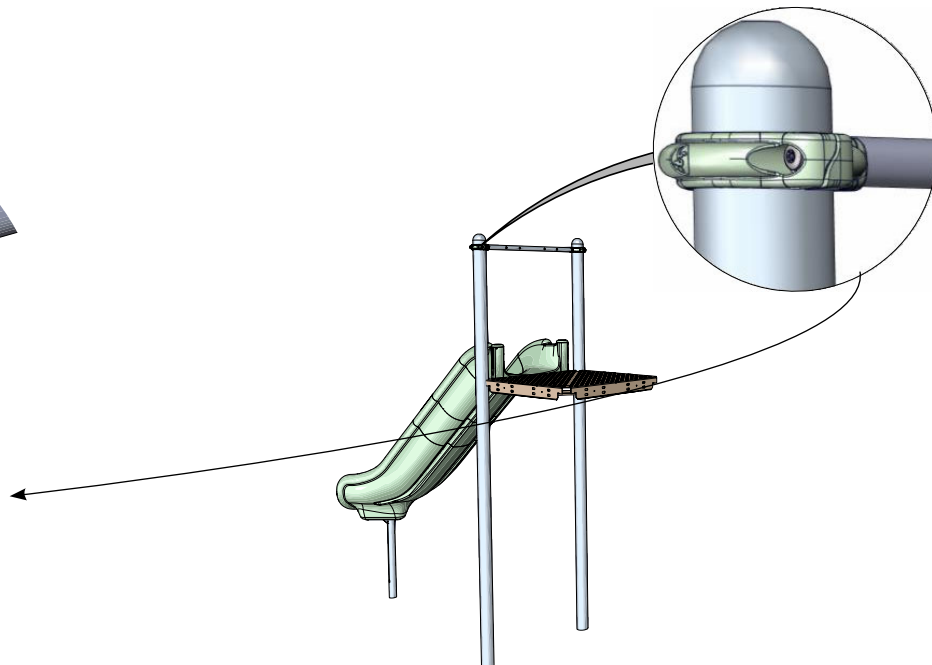
Attach the clamps to the canopy top rail.



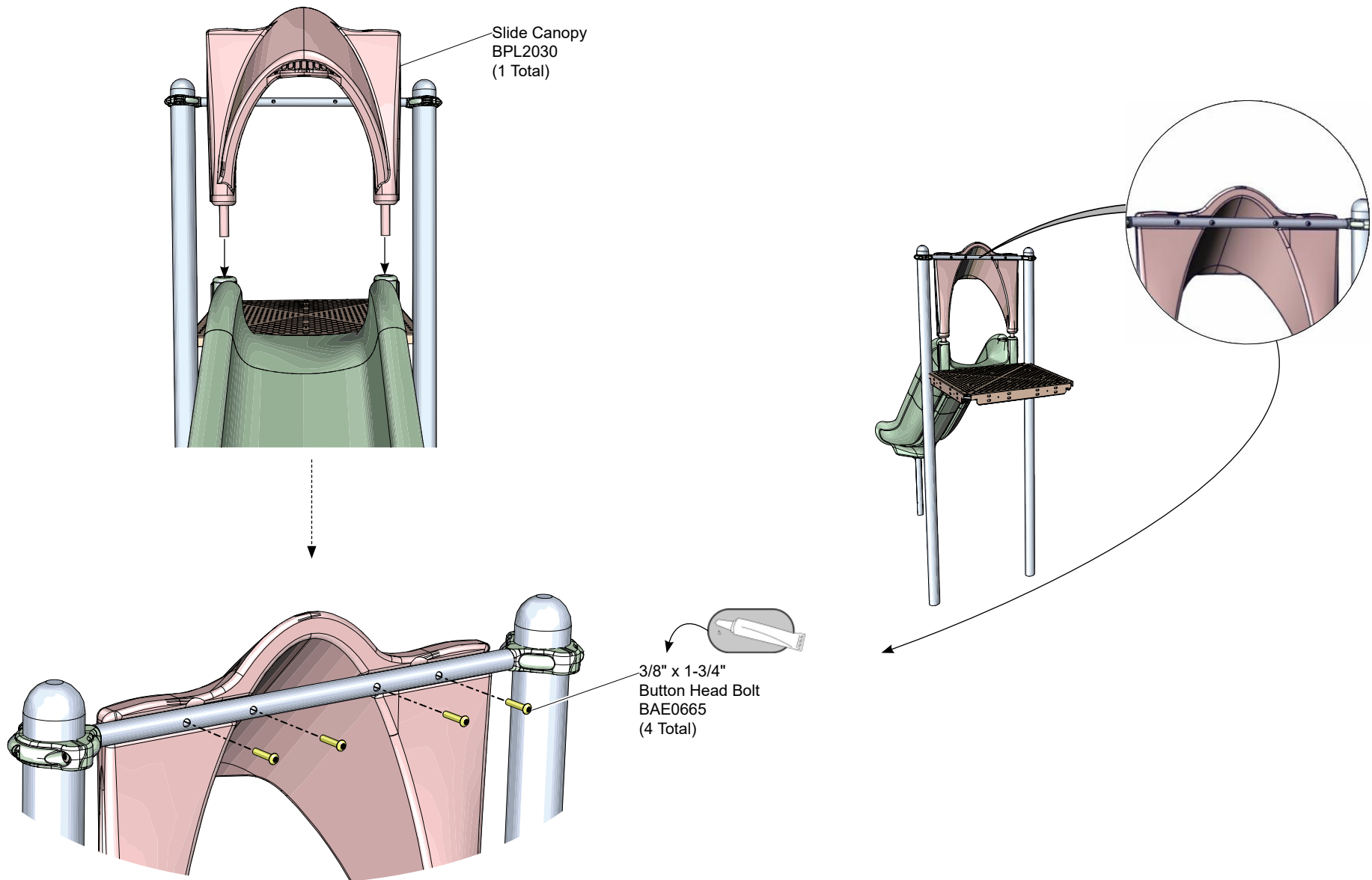
Detail D
Step 7



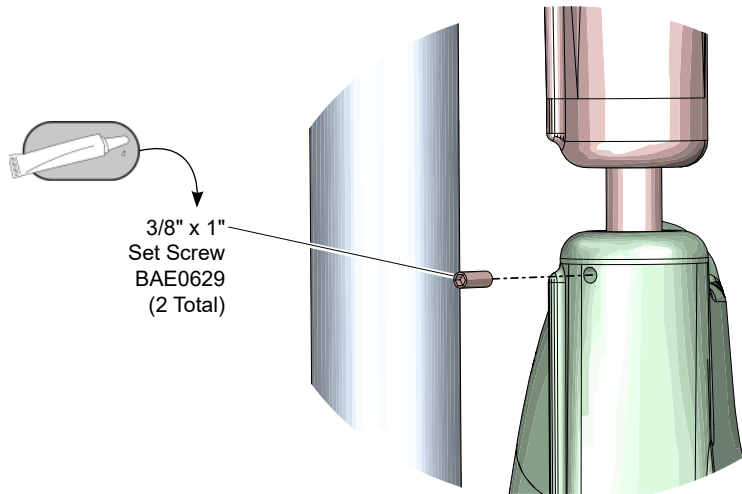
Attach the canopy top rail to the support posts.



Installation Instructions

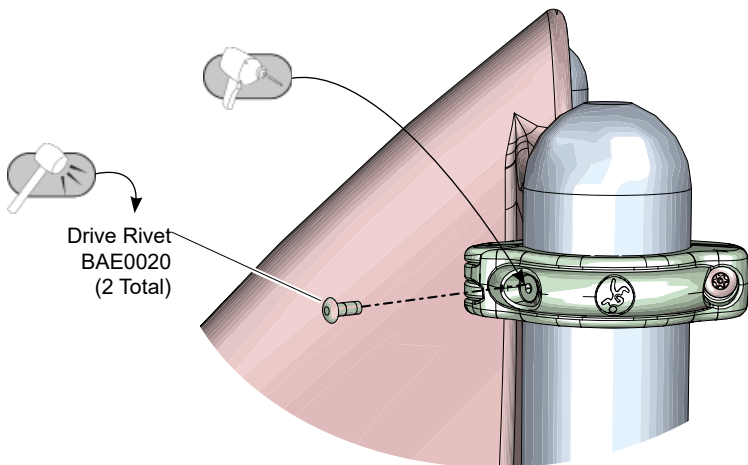
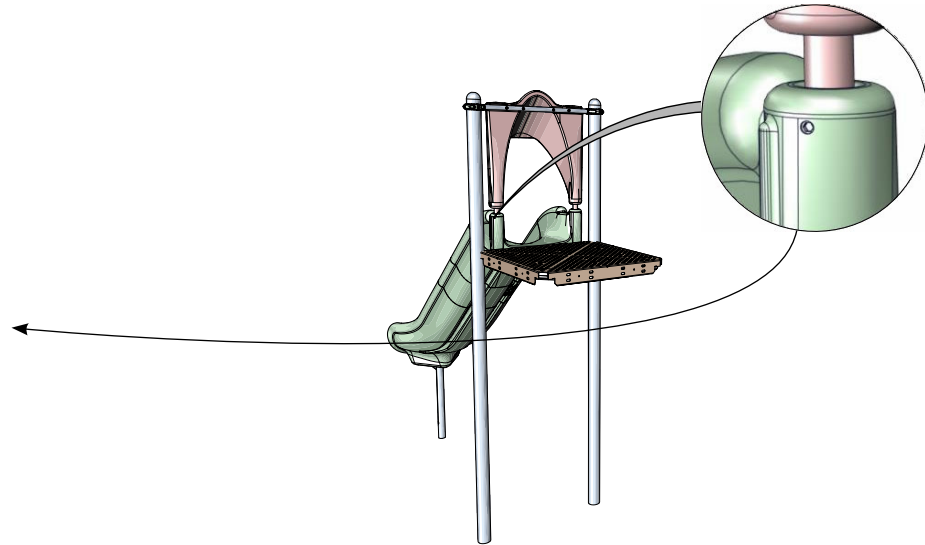


Installation Instructions



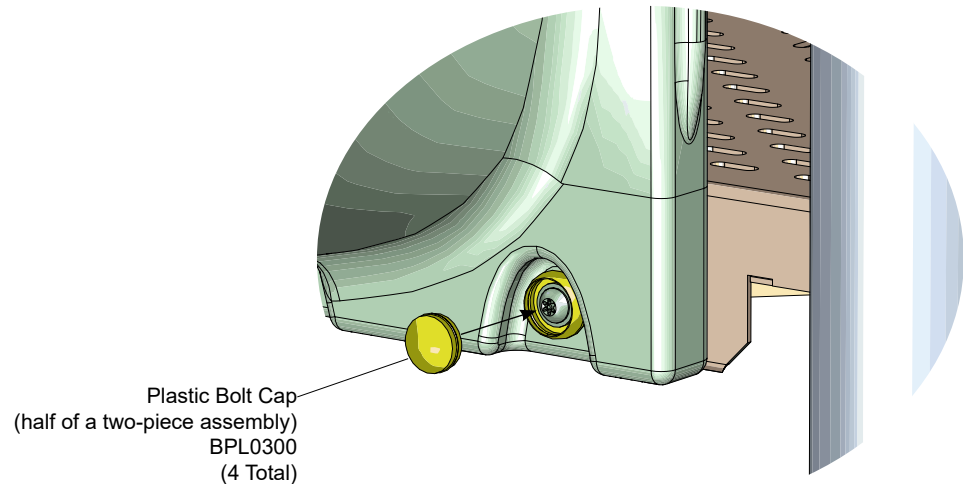
Detail F
Step 9

Attach the slide canopy to the glide slide.



Detail G
Step 11

Attach the slide canopy to the glide slide.



Detail H
Step 12

Insert the plastic caps into the plastic washers.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete. Do not install bolt caps until the structure is completely assembled and properly footed.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate the footing as shown in the **Component Footing Detail** in the *Guidelines* at the beginning of this instruction booklet.

Step 4: Attach the support leg to the slide. See **Detail A**. Position the mounting plate on the support leg against the bottom of the slide, apply a drop of thread locking adhesive to the bolt threads and attach as shown. Fully tighten the connections according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 5: Attach the slide to the deck. See **Details B-1 and B-2**. Position the top of the slide against the deck and align the holes. Apply a drop of thread locking adhesive to the bolt threads and attach the slide to the upper holes in the deck from inside the deck. From the outside of the deck, attach the slide to the lower holes in the deck as shown.

Step 6: Attach the clamps to the canopy top rail. See **Detail C**. Position a clamp against each end of the canopy top rail and attach as shown. *Clamps should open in the same direction*. Fully tighten the connections according to tightening torque specifications.

Step 7: Attach the canopy top rail to the support posts. See **Detail D**. Position the canopy top rail between the support posts. Close the clamps around the posts at the height shown in the **Elevation View**, apply a drop of thread locking adhesive to the bolt threads and attach as shown.

Step 8: Attach the slide canopy to the canopy top rail. See **Detail E**. Position the canopy over the slide and insert the canopy extensions into the top of the slide with the top of the canopy against the top rail. Apply a drop of thread locking adhesive to the bolt threads and attach the canopy to the top rail as shown.

Step 9: Attach the slide canopy to the glide slide. See **Detail F**. Apply a drop of thread locking adhesive to the set screw threads and attach the canopy to the top of the slide as shown.

Final Details.

Step 10: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure. Adjust the exit height of the slide so it will not hold water. See **Elevation View**.

36" - 48" Slides: The slide height can be adjusted to avoid retaining water but can be no greater than 11 in. (279 mm) from the protective surfacing.

60" - 72" Slides: The slide height can be adjusted to avoid retaining water but can be no less than 7 in. (178 mm) and no greater than 15 in. (381 mm) from the protective surfacing.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

Step 11: Install drive rivets. See **Detail G**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Step 12: Select plastic bolt caps and press into the plastic washers. See **Detail H**. The bolt caps install more easily when they are warm.

Step 13: Apply the hood string entanglement warning label to the slide.

CH2658 - 60 in. (1524 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
AFM1227	FAB. METAL - 1.315" O.D. x 30.50"	1
APT5491	POST - 28.94" x 13.92" x 10.23"	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	12
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4
BAE06673	BOLT - 3/8"-16 x 2" BUTTON HEAD - SS	4
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2032	SLIDE - 60" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

CH2696 - 72 in. (1829 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
AFM1227	FAB. METAL - 1.315" O.D. x 30.50"	1
APT5491	POST - 28.94" x 13.92" x 10.23"	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	12
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4
BAE06673	BOLT - 3/8"-16 x 2" BUTTON HEAD - SS	4
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2033	SLIDE - 72" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

CH3126 - 48 in. (1219 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
AFM1227	FAB. METAL - 1.315" O.D. x 30.50"	1
APT5491	POST - 28.94" x 13.92" x 10.23"	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	12
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMRP RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4
BAE06673	BOLT - 3/8"-16 x 2" BUTTON HEAD - SS	4
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2031	SLIDE - 48" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1

CH3127 - 36 in. (914 mm) GLIDE SLIDE

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
AFM1227	FAB. METAL - 1.315" O.D. x 30.50"	1
APT5491	POST - 28.94" x 13.92" x 10.23"	1
BAD0085	THREAD LOCKING ADHESIVE	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	12
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0629	SCREW - 3/8"-16 x 1" SOCKET SET SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMRP RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4
BAE06673	BOLT - 3/8"-16 x 2" BUTTON HEAD - SS	4
BPL0300	CAP - 3/8" BOLT	4
BPL2030	CANOPY - SINGLE GLIDE SLIDE	1
BPL2035	SLIDE - 36" SINGLE GLIDE	1
ALB0030	LABEL-HOOD STRING ENTNGLMNT WRNG LABEL	1





Assembly View


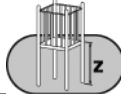

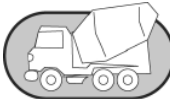
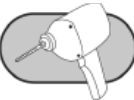

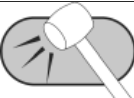
Installation Instructions

Challengers® Model CH4095
Centerline Pipe Wall Barrier

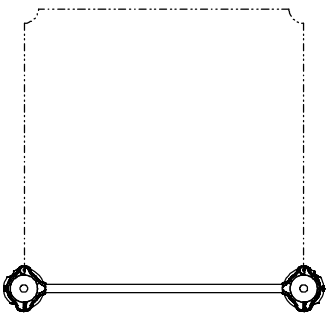
Installation Preparation

Recommended Crew: One (1) adult
Installation Time: 0.5 installation-hours
Use Zone:..... Refer to Master Drawing
User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

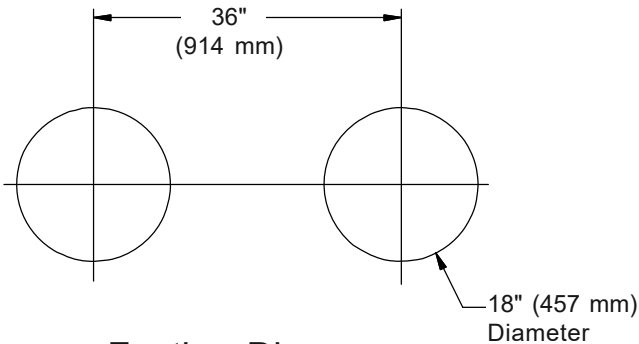
ICON KEY

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	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

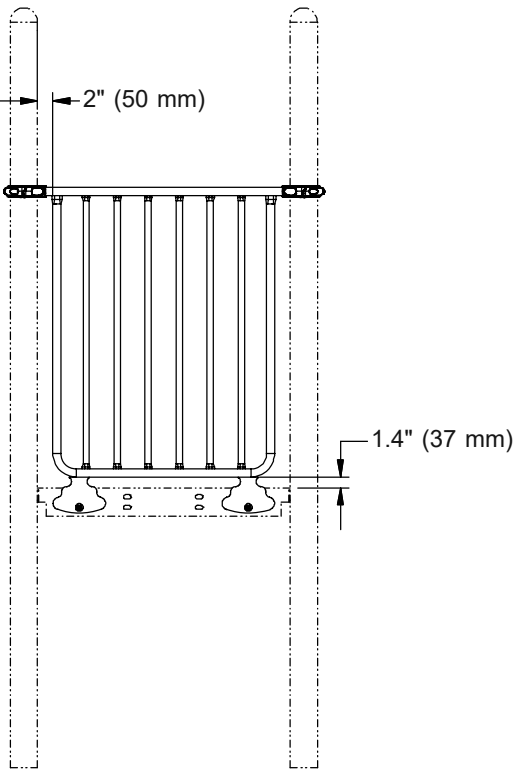
Installation Instructions



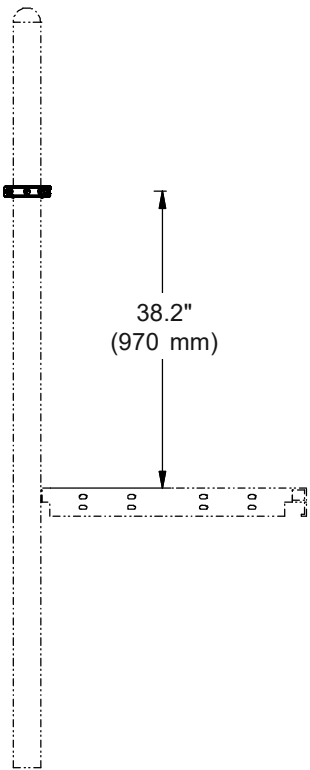
Top View



Footing Diagram

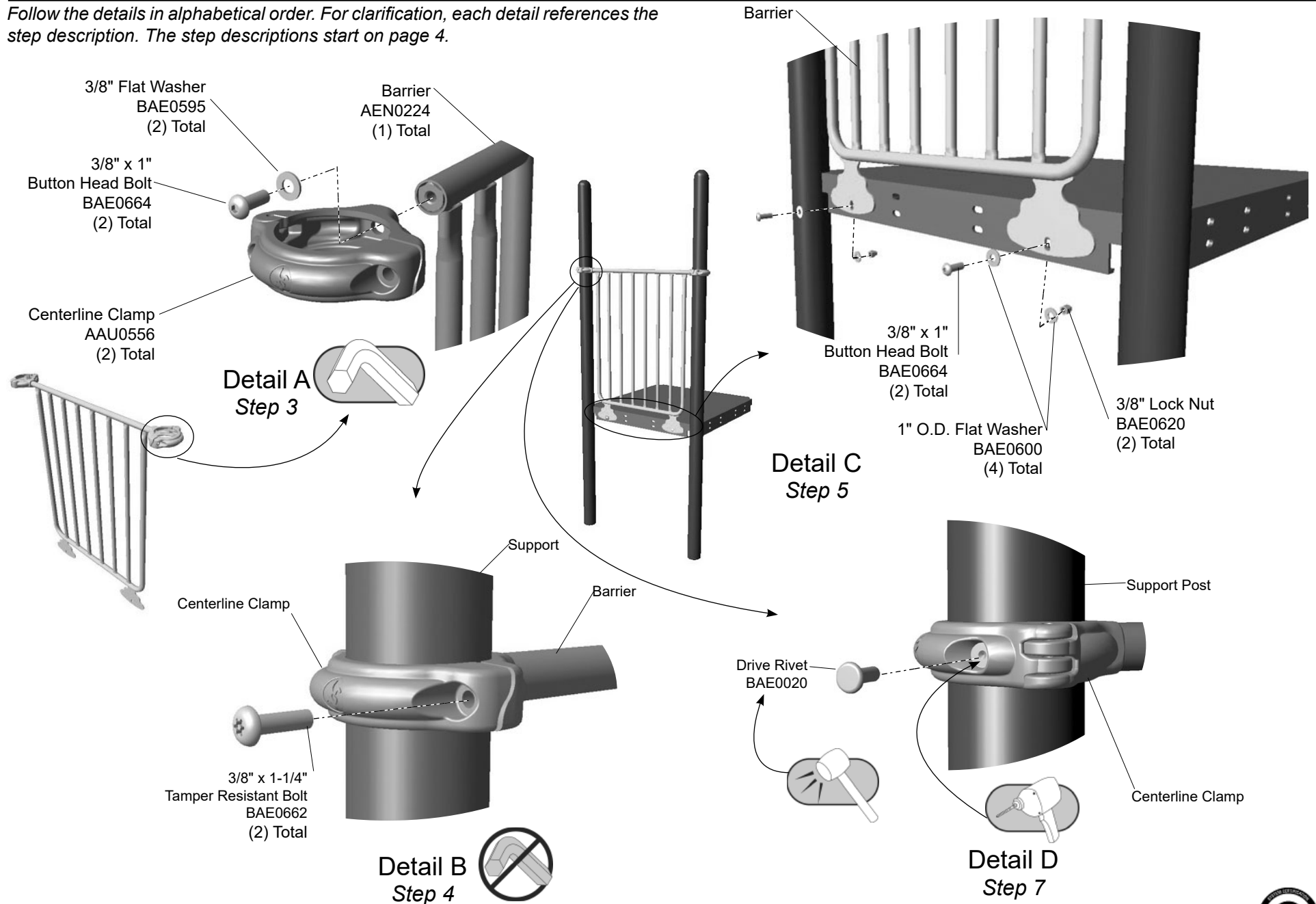


Elevation View



Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 4.



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Attach the clamps to the barrier.

Step 3: See **Detail A**. Attach as shown. Make sure the clamps open the same direction.

Attach the clamps to the support posts.

Step 4: See **Detail B**. Lift the barrier into position against the deck. Close the clamps around the support posts. Align the barrier plates with the deck. Attach as shown. Snug tighten connection only. The location of the clamp may need to be changed to align deck connection holes or resolve clamp position conflicts.

Note: To avoid clamp interference, the deck has been provided with an upper and lower set of holes. Choose the either set of holes that works best with your clamp placement condition.

Attach the bottom of the barrier to the deck.

Step 5: See **Detail C**. Attach as shown.

Final Details.

Step 6: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 7: Install drive rivets. See **Detail D**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

CH4095 - CENTERLINE PIPE WALL BARRIER

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
AEN0224	BARRIER - 30-1/2" x 41-7/8" CENTERLINE PIPEWALL	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	4
BAE0620	NUT - 3/8"-16 LOCK w/ NYLON CAP	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESISTANT	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4



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Assembly View

Installation Instructions

Challengers® Model CH4537


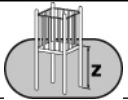




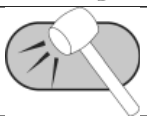
Spin Racer Panel

Deck Level

Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 1 man-hour
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

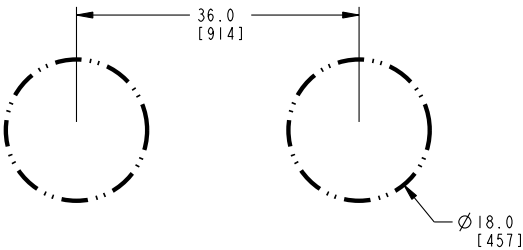
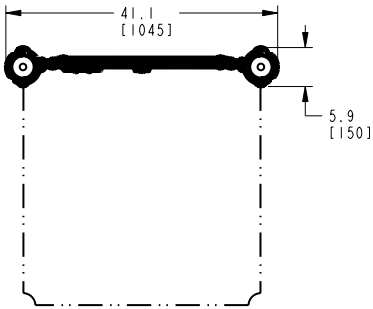
ICON KEY

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	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

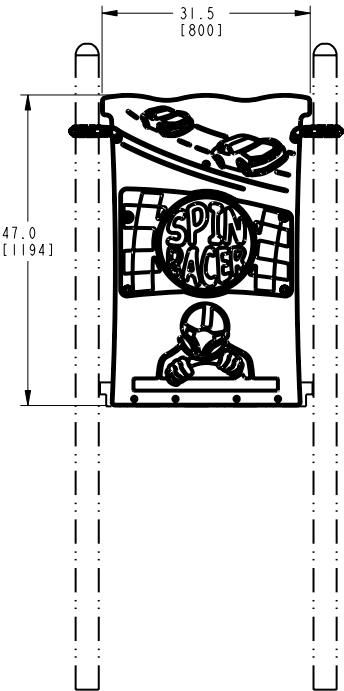
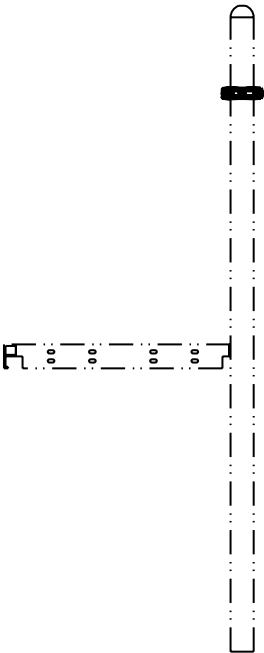
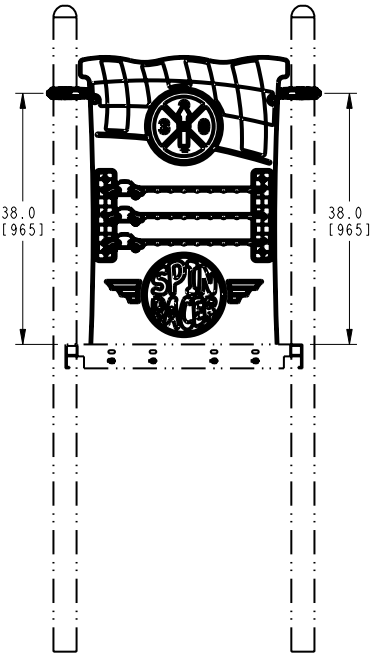
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View



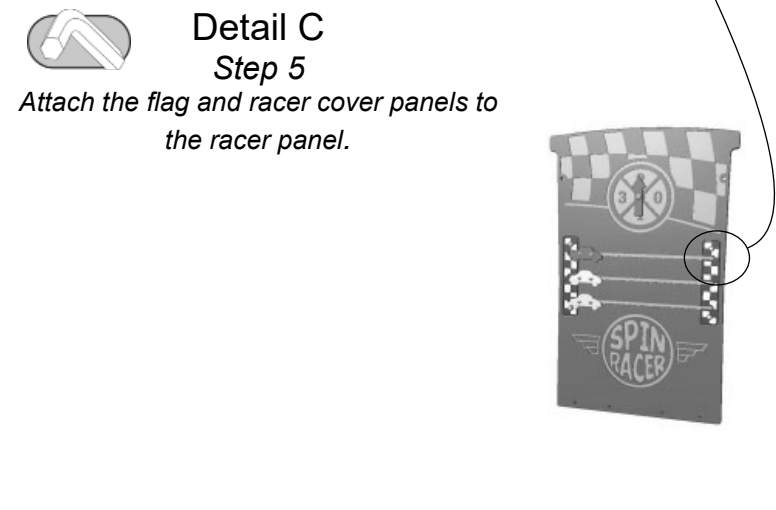
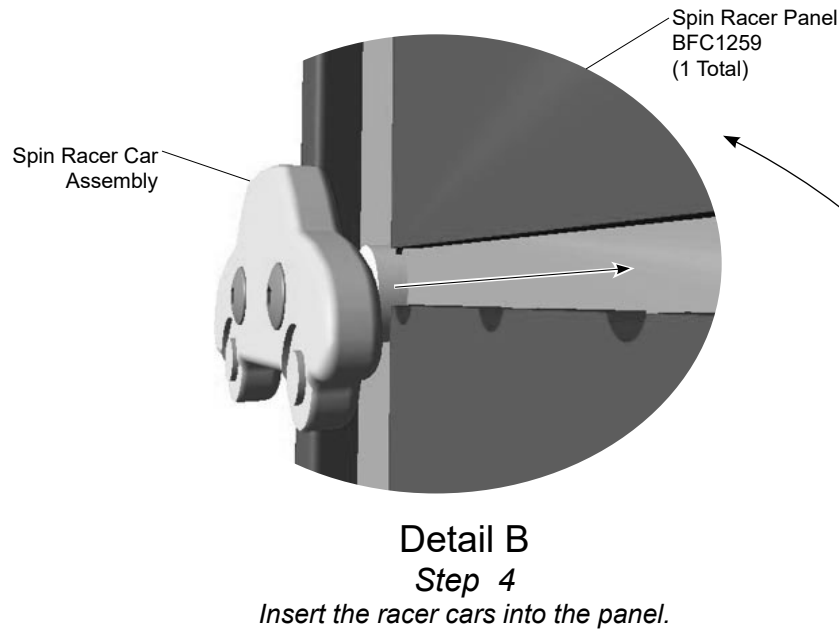
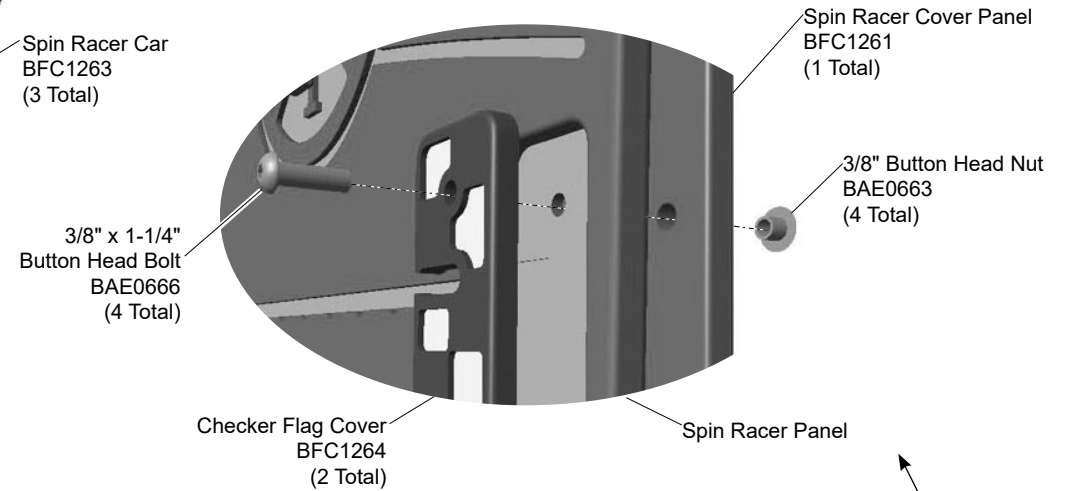
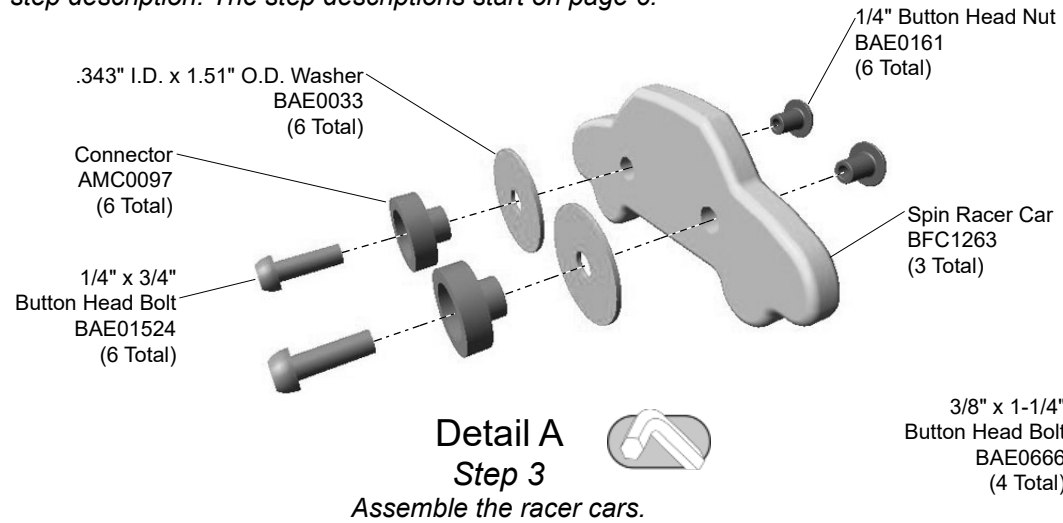
Footing Diagram



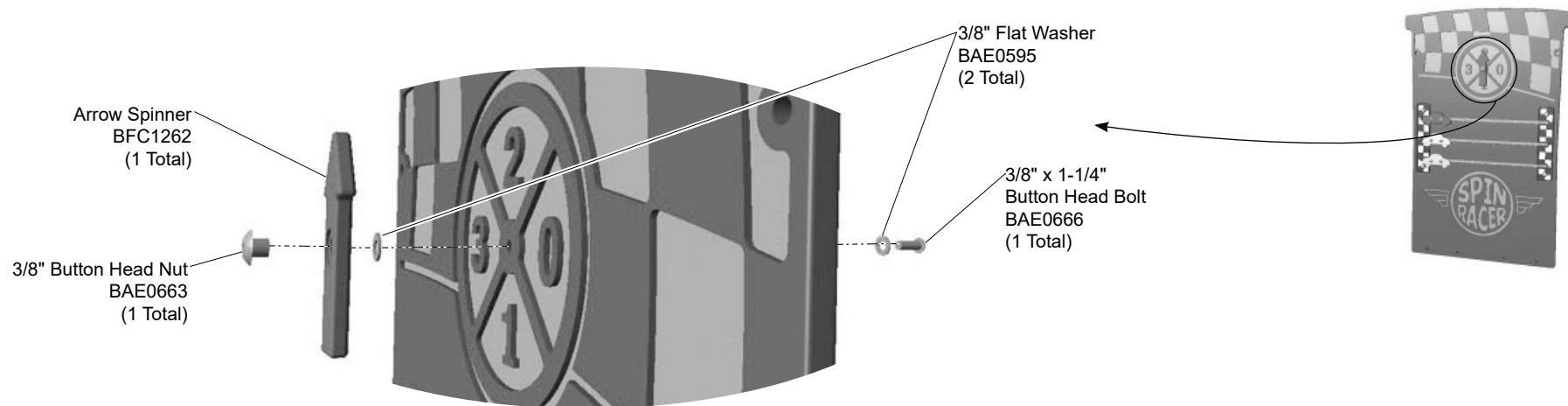
Elevation Views



Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 6.



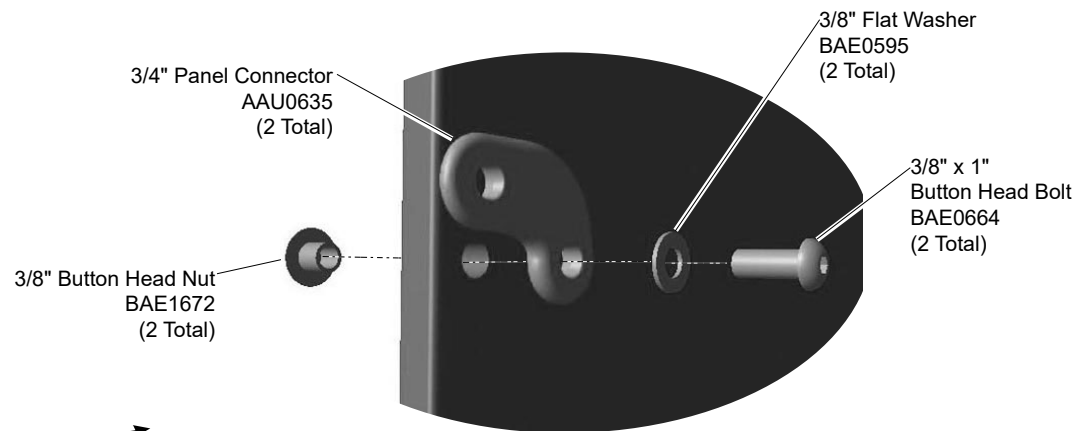
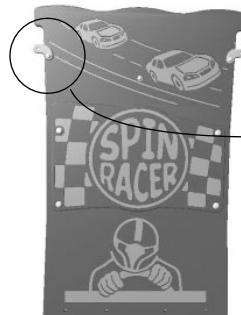
Installation Instructions



Detail D

Step 6

Attach the arrow spinner to the racer panel.

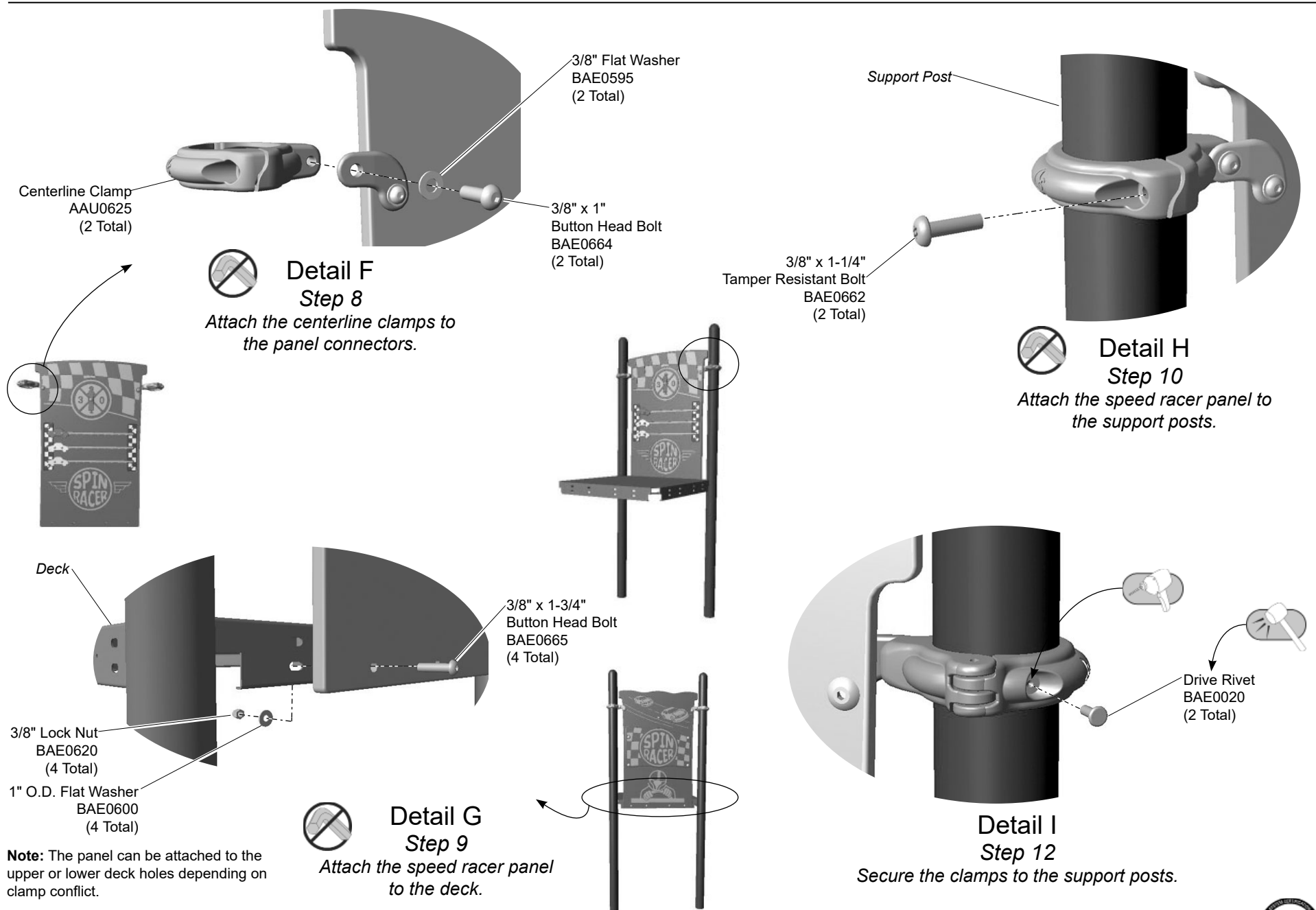


Detail E

Step 7

Attach the panel connectors to the top backside of the racer panel.

Installation Instructions



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Assemble the racer cars. See **Detail A**. Assemble the racer cars as shown. Fully tighten the connections according to tightening torque specifications (See **Final Details**).

Step 4: Insert the racer cars into the panel. See **Detail B**. Insert the racer cars into the tracks in the panel as shown. There is (1) one car per track.

Step 5: Attach the flag and racer cover panels to the racer panel. See **Detail C**. Insert the checker flag covers into the appropriate slots on the front of the racer panel. Position the racer cover panel against the back of the racer panel, align the holes and attach as shown. Fully tighten the connections according to tightening torque specifications (See **Final Details**).

Step 6: Attach the arrow spinner to the racer panel. See **Detail D**. Position the arrow spinner over the numeric cutout section on the front of the racer panel and attach as shown. Fully tighten the connection being careful not to over tighten the bolt.

Step 7: Attach the panel connectors to the top backside of the racer panel. See **Detail E**. Position each panel connector so that the hole in the short leg aligns with the hole in the top of the panel. Panel connectors must all attach to the side of the panel opposite the cars. Leave the connections loose for alignment adjustment. Attach as shown.

Step 8: Attach the clamps to the panel connectors. See **Detail F**. Place the flat side of each clamp against the activity side of a connector. Attach as shown.

Step 9: Attach the panel assembly to the deck. See **Detail G**. Position the panel against the deck and close the clamps around the support post and attach the panel to the lower holes in the deck as shown.

Note: The panel can be attached to the upper or lower deck holes depending on clamp conflict.

Step 10: Attach the racer panel to the support posts. See **Detail H**. Position the panel between the support posts at the height shown in the **Elevation View** and close the clamps around the support posts. Attach as shown.

Note: In the event of a clamp conflict with an adjacent component, the panel connector can be flipped upside down and reconnected to the panel. Remove the connector from both the panel and clamp before flipping and then reattach as shown in **Step 7** and **Step 8**. If possible, both the clamps should be mounted at the same height.

Final Details.

Step 11: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 12: Install drive rivets. See **Detail I**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Bill of Materials

CH4537 - SPIN RACER PANEL DECK LEVEL

PART NO.	DESCRIPTION	QTY.
AAU0625	CLAMP - 3-1/2" OFFSET CENTERLINE DIE CAST	2
AAU0635	CONNECT - 3/4" PANEL	2
AMC0097	CONNECTOR - 1 DIA x .57 w/HOLE	6
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0033	WASHER - .343" I.D. x 1.500" O.D.	6
BAE01524	BOLT - 1/4"-20 x 3/4" BUTTON HEAD - SS	6
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	6
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	2
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	5
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	5
BAE1672	NUT - 3/8"-16 x 11/16" BUTTON HEAD	2
BFC1259	SHEET - 31.50" x 47.57" SPIN RACER PANEL	1
BFC1261	SHEET - 16.35" x 26.00" SPIN RACER COVER	1
BFC1262	SHEET - ARROW SPINNER	1
BFC1263	SHEET - SPIN RACER CAR	3
BFC1264	SHEET - CHECKER FLAG COVER	2



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Assembly View



*Frog Button
(example of one
of ten buttons)*


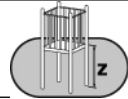

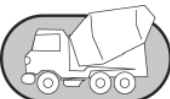
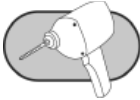

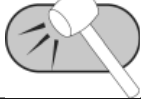
Installation Instructions

Challengers® Model CH4546
Scavenger Hunt
Deck Level

Installation Preparation

Recommended Crew: Two (2) adults
Installation Time: 2 man-hours
Use Zone: Refer to Master Drawing
User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

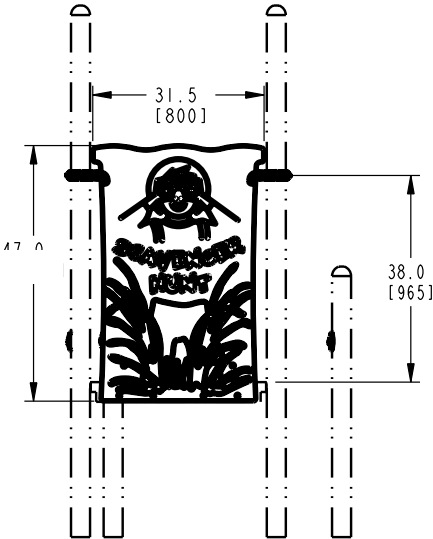
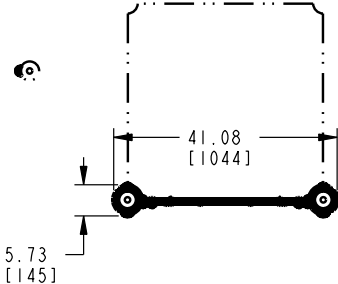
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View

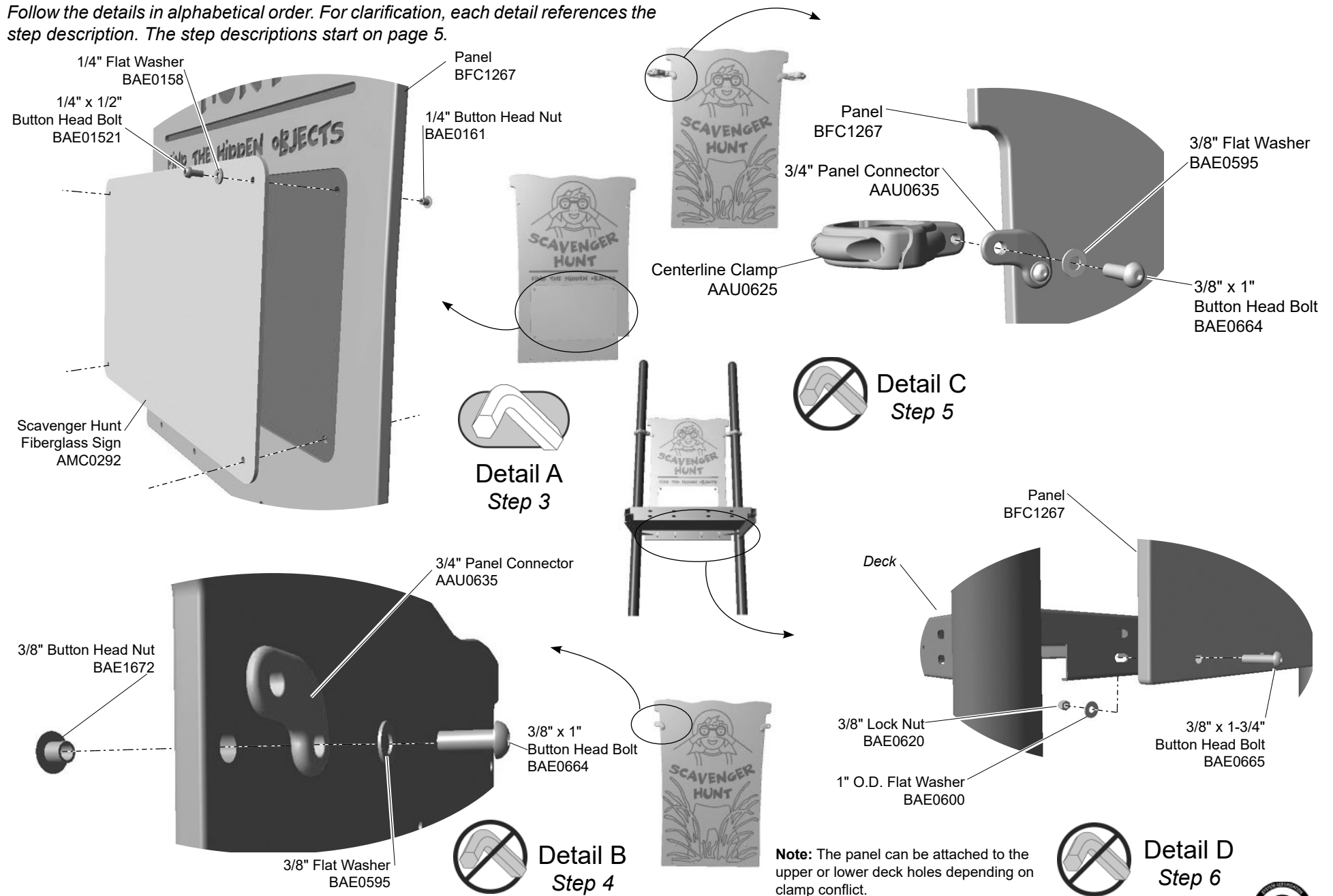


Elevation Views


Locate buttons on support posts as various heights and locations around the playground.

Installation Instructions

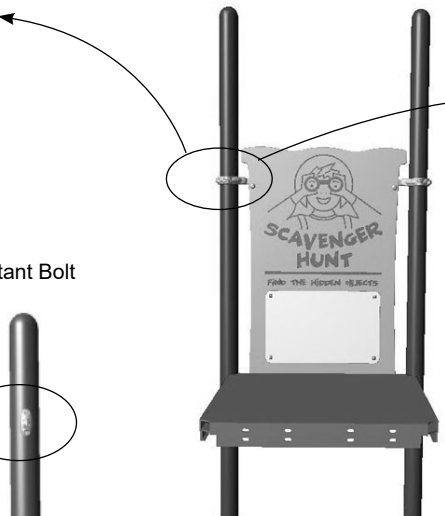
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.




Installation Instructions




3/8" x 1-1/4"
Tamper Resistant Bolt
BAE0662



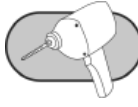
SCAVENGER HUNT




Detail E
Step 7



Pop Rivet
BAE0121



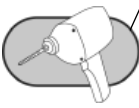
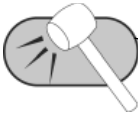
Casting
(refer to chart)



Rivet Gun

Shape	Casting Part Number
Butterfly	AAU0641
Flower	AAU0642
Frog	AAU0643
Pickle	AAU0644
Star	AAU0645
Carrot	AAU0646
Apple	AAU0647
Clock	AAU0648
Fish	AAU0649
Smiley Face	AAU0650

Drive Rivet
BAE0020



Detail F
Step 9

Detail G
Step 10

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Attach the fiberglass sign to the panel.

Step 3: Attach the fiberglass sign to the panel. See **Detail A**. Select the scavenger hunt panel, the fiberglass sign, and the appropriate hardware. There are (4) four connections. Position the fiberglass sign in the cutout section of the panel and attach as shown.

Attach the panel connectors to the panel.

Step 4: Attach the panel connectors to the panel. See **Detail B**. Select the panel connectors, and the appropriate hardware. There are (2) two connections. Each panel connector looks like an 'L'. Position each panel connector so that the short leg points down. The long leg should point out away from the panel. The panel connectors must all attach to the same side of the panel (this side will face in). Align the connectors with the holes and attach as shown. Leave the connections loose.

Step 5: Attach the clamps to the panel connectors. See **Detail C**. Select the clamps and the appropriate hardware. There are (2) two connections. Place the flat side of each clamp against the outside of the panel connector. Attach as shown. Leave the connections loose for alignment adjustment.

Attach the panel to the deck.

Step 6: Attach the panel to the deck. See **Detail D**. Select the appropriate hardware. There are (4) four connections. Raise the panel into place against the deck and align the holes in the panel with the lower holes in the deck. Attach as shown.

Note: The panel can be attached to the upper or lower deck holes depending on clamp conflict.

Attach the panel to the support posts.

Step 7: Attach the panel to support posts. See **Detail E** and **Elevation View**. Select the clamps and the appropriate hardware. There are (2) two connections. Move the panel into position on the outside of the posts and close the clamps. Attach as shown.

Note: In the event of a clamp conflict with an adjacent component, the panel connector can be flipped upside down and reconnected to the panel.

Important Note: The long portion of the panel connector must be level to prevent any string entanglement issues.

Final Details.

Step 8: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Attach the castings to support posts.

Step 9: Attach the castings to the support posts. See **Detail F**. Select the appropriate hardware. There are (2) two connections per casting, (20) twenty total connections. Choose various locations around the playground to locate the castings. Using the supplied 3/16" drill bit, drill a hole in the post at the appropriate location and insert a pop rivet through the casting into the post using the standard rivet gun supplied.

Step 10: Install drive rivets in the clamps. See **Detail G**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Step 11: For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the component at eye level.

ZZCH4546 - SCAVENGER HUNT DECK LEVEL

PART NO.	DESCRIPTION	QTY.
AAU0625	CLAMP - 3-1/2" OFFSET CENTERLINE DIE CAST	2
AAU0635	CONNECT - 3/4" PANEL	2
AAU0641	CASTING - BUTTERFLY	1
AAU0642	CASTING - FLOWER	1
AAU0643	CASTING - FROG	1
AAU0644	CASTING - PICKLE	1
AAU0645	CASTING - STAR	1
AAU0646	CASTING - CARROT	1
AAU0647	CASTING - APPLE	1
AAU0648	CASTING - CLOCK	1
AAU0649	CASTING - FISH	1
AAU0650	CASTING - SMILEY FACE	1
AMC0292	SIGN - SCAVENGER HUNT FIBERGLASS	1
AMC0304	TOOL - 3/16" STANDARD RIVET GUN	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0121	RIVET - 3/16" x .56 ALUM POP (.251" - .375" GRIP RANGE)	20
BAE01521	BOLT - 1/4"-20 x 1/2" BUTTON HEAD - SS	4
BAE0158	WASHER - 1/4" SAE FLAT	4
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	4
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0600	WASHER - 1" O.D. FLAT	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RESISTANT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	4
BAE1672	NUT - 3/8"-16 x 11/16" BUTTON HEAD	2
BAE1668	MISC - 3/16" DRILL BIT	1
BFC1267	SHEET - 31.50" x 47.00" SCAVENGER HUNT	1
ALB0025	LABEL - AGE APPROPRIATE SHEET	1



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Assembly View (representative model)

Model	Bell Diameter
ZZCH4556	7" (178 mm)
ZZCH4557	8" (203mm)
ZZCH4558	9" (229 mm)
ZZCH4559	10" (254 mm)

Installation Instructions


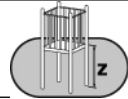

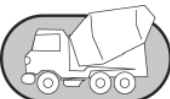


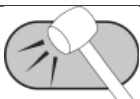
Challengers® Models CH4556, CH4557,
CH4558, and CH4559

7 in. (178 mm), 8 in. (203 mm),
9 in. (229 mm), and 10 in. (254 mm)
Bell (Post Mount)

Installation Preparation

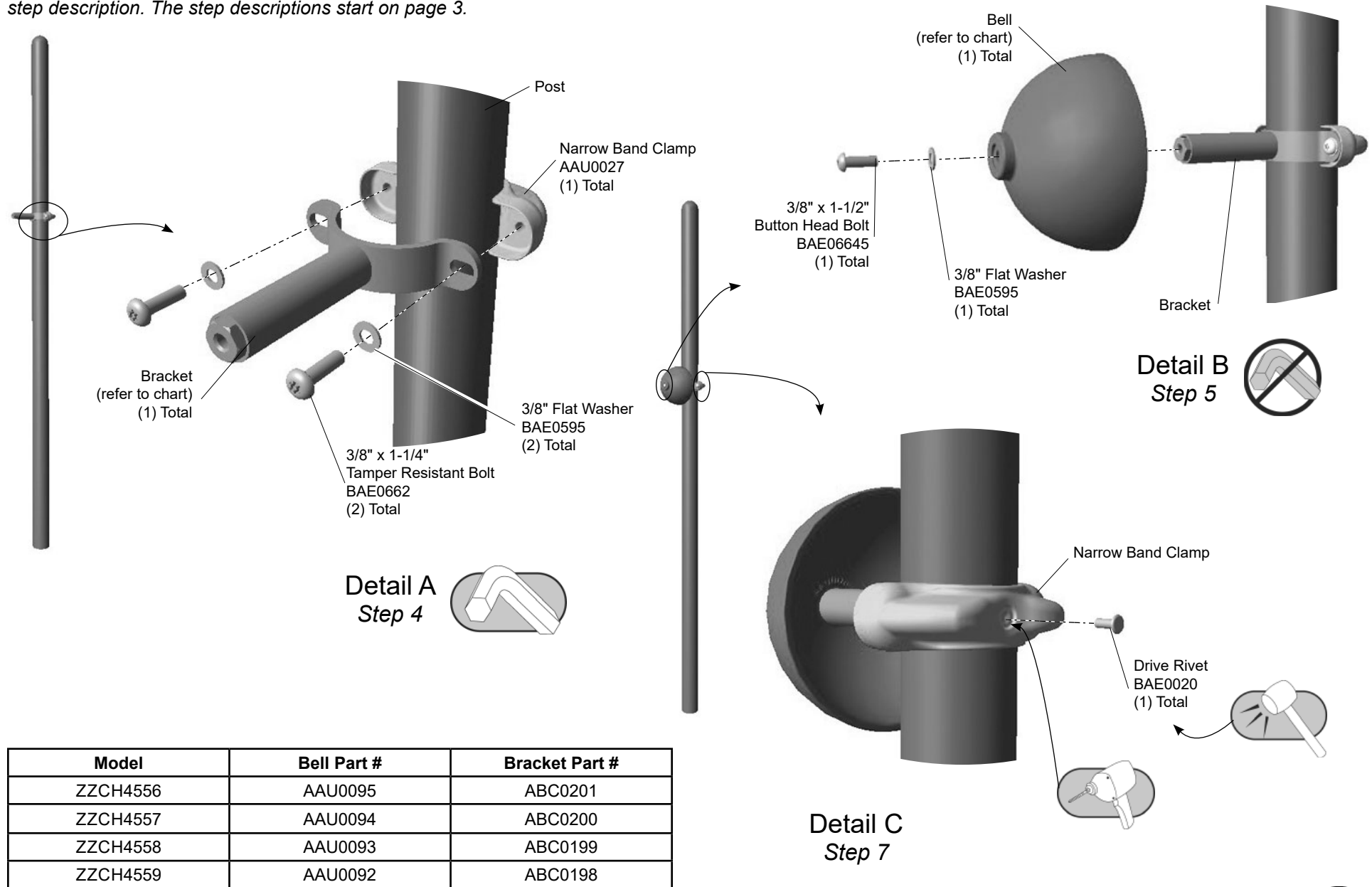
Recommended Crew: One (1) adult
Installation Time: 0.25 hour
Use Zone: Refer to Master Drawing
User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 3.



Model	Bell Part #	Bracket Part #
ZZCH4556	AAU0095	ABC0201
ZZCH4557	AAU0094	ABC0200
ZZCH4558	AAU0093	ABC0199
ZZCH4559	AAU0092	ABC0198

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Determine location of the bell by referring to the master plan view / structure layout drawing.

Attach mounting bracket to the post.

Step 4: See **Detail A**. Position the mounting bracket against the support post at the desired height. Attach as shown Snug tighten connections.

Attach bell to the mounting bracket.

Step 5: See **Detail B**. Place the concave side of the bell over the mounting bracket and align holes. Attach as shown.

Final Details.

Step 6: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 7: Install drive rivets. See **Detail C**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Bill of Materials

CH4556 - 7 in. (178 mm) BELL (POST MOUNT)

PART NO.	DESCRIPTION	QTY.
AAU0027	CLAMP - 3-1/2" NARROW ALUMINUM BAND	1
AAU0095	MISC - 7.00" dia. x 3.88" BELL	1
ABC0201	BRACKET - 3-1/2" dia. x 6-3/8"	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	1
BAE0595	WASHER - 3/8" SAE FLAT	3
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESISTANT	2
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1

CH4559 - 10 in. (254 mm) BELL (POST MOUNT)

PART NO.	DESCRIPTION	QTY.
AAU0027	CLAMP - 3-1/2" NARROW ALUMINUM BAND	1
AAU0092	MISC - 10.00" DIA. x 5.38" BELL	1
ABC0198	BRACKET - 3-1/2" DIA. x 7-7/8"	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	1
BAE0595	WASHER - 3/8" SAE FLAT	3
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESISTANT	2
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1

CH4557 - 8 in. (203 mm) BELL (POST MOUNT)

PART NO.	DESCRIPTION	QTY.
AAU0027	CLAMP - 3-1/2" NARROW ALUMINUM BAND	1
AAU0094	MISC - 8.00" dia. x 4.38" BELL	1
ABC0200	BRACKET - 3-1/2" dia. x 6-7/8"	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	1
BAE0595	WASHER - 3/8" SAE FLAT	3
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESISTANT	2
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1

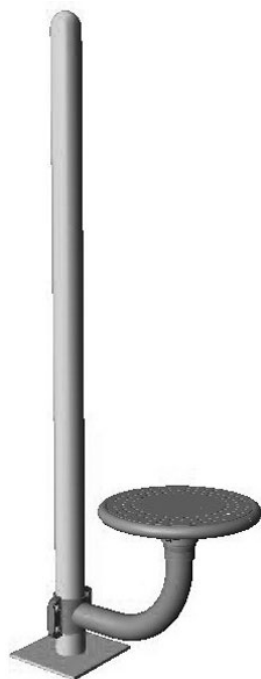
CH4558 - 9 in. (229 mm) BELL (POST MOUNT)

PART NO.	DESCRIPTION	QTY.
AAU0027	CLAMP - 3-1/2" NARROW ALUMINUM BAND	1
AAU0093	MISC - 9.00" dia. x 4.88" BELL	1
ABC0199	BRACKET - 3-1/2" dia. x 7-3/8"	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	1
BAE0595	WASHER - 3/8" SAE FLAT	3
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESISTANT	2
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1



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Assembly View

Installation Instructions


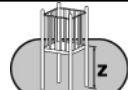




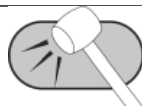
Challengers® Model CH4578
Family Furnishings - Anywhere Seat

Installation Preparation

Recommended Crew: One (2) adult

Installation Time: 0.25 hour

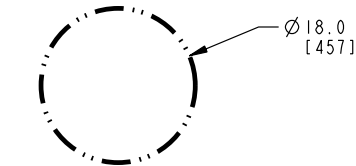
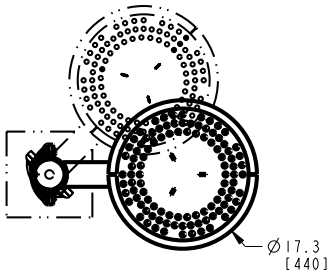
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

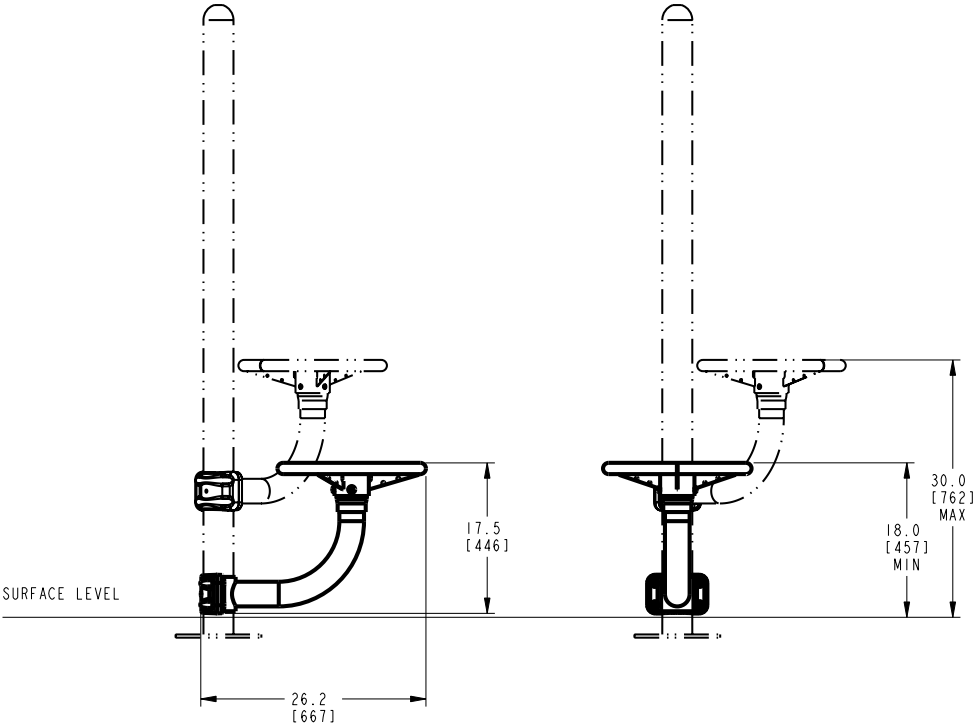
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View



Footing Diagram

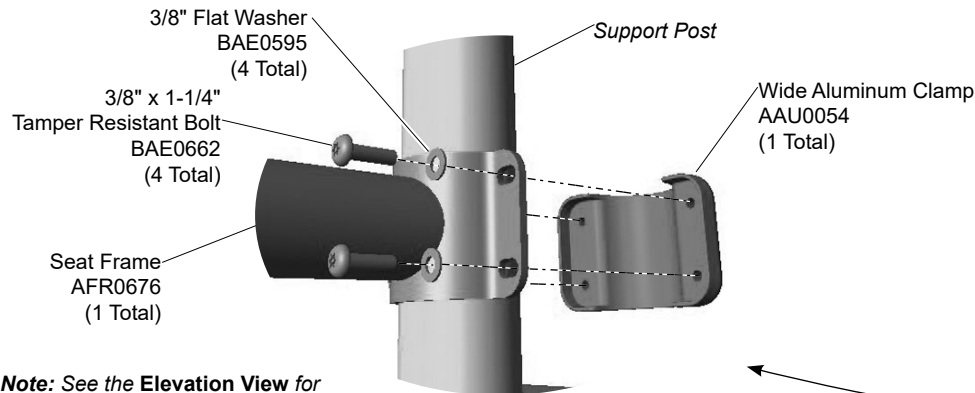


Elevation Views



Installation Instructions

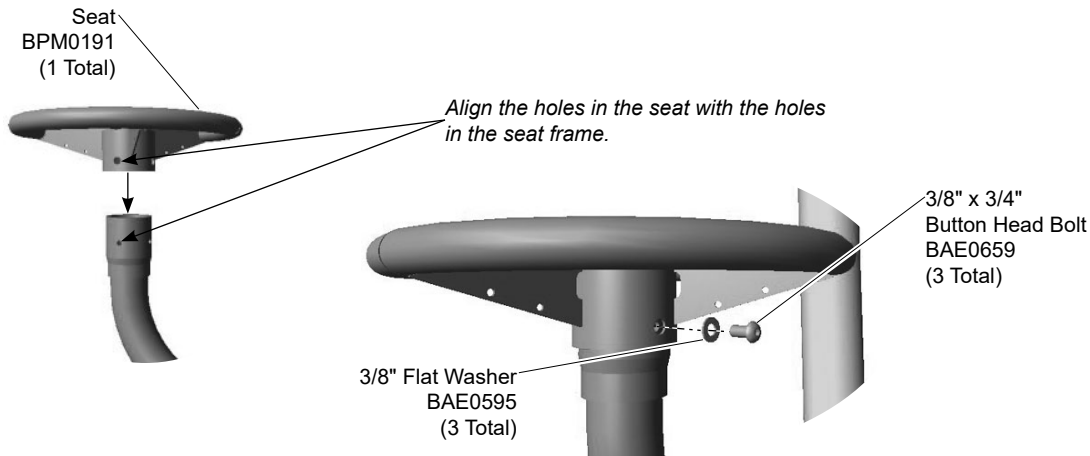
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 4.



Note: See the Elevation View for the minimum and maximum heights that the seat may be mounted.

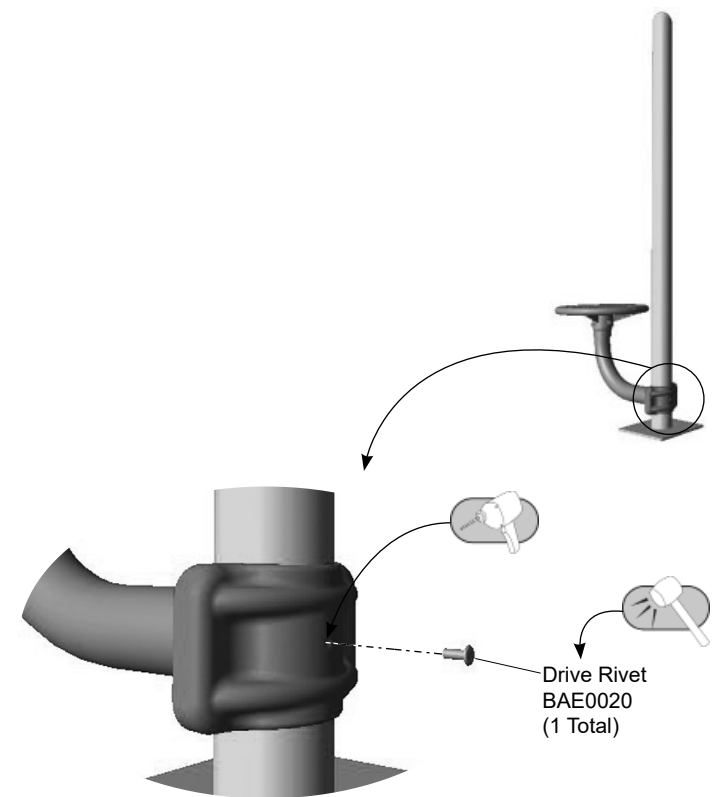
Detail A Step 3

Attach the seat frame to the support post.



Detail B Step 4

Attach the seat to the seat frame.



Detail C Step 6

Secure the clamp to the support post.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Attach the seat frame to the support post. See **Detail A**. Position the seat frame against the support post and attach as shown.

Note: See the **Elevation View** for the minimum and maximum heights that the seat may be mounted.

Step 4: Attach the seat to the seat frame. See **Detail B**. Place the seat on top of the seat frame, align the holes and attach as shown.

Final Details.

Step 5: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 6: Install drive rivets. See **Detail C**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

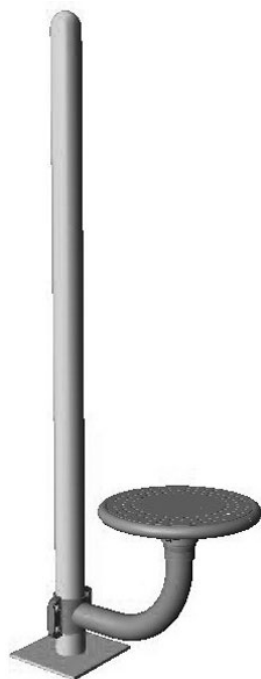
Note: This step should be executed after structure has been assembled and properly footed.

Bill of Materials

CH4578 - FAMILY FURNISHINGS - ANYWHERE SEAT

PART NO.	DESCRIPTION	QTY.
AAU0054	CLAMP - 3-1/2" DIA. x 4-1/2" WIDE ALUMINUM	1
AFR0676	FRAME - 3-1/2" SINGLE POST SEAT	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	1
BAE0595	WASHER - 3/8" SAE FLAT	7
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	3
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BPM0191	SEAT - 3.86" x 17.12" x 17.12"	1





Assembly View

Installation Instructions


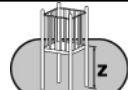




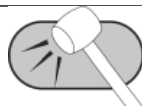
Challengers® Model CH4578
Family Furnishings - Anywhere Seat

Installation Preparation

Recommended Crew: One (2) adult

Installation Time: 0.25 hour

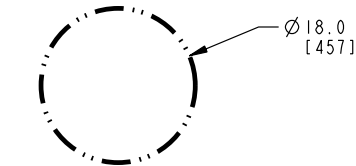
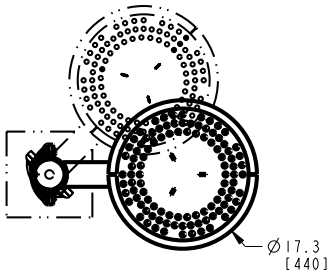
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

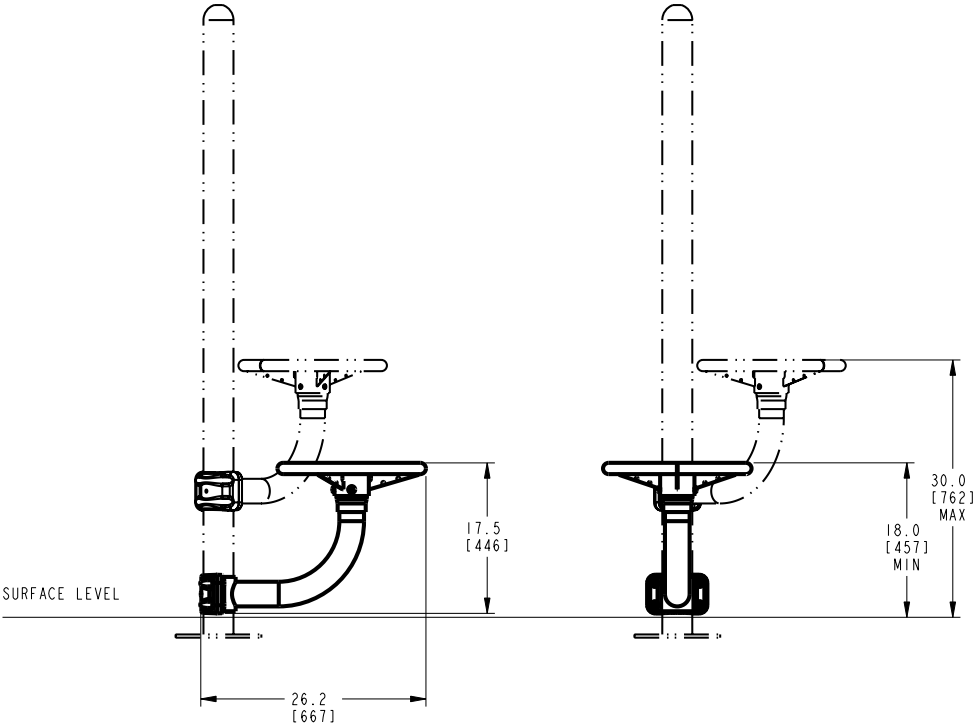
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View



Footing Diagram

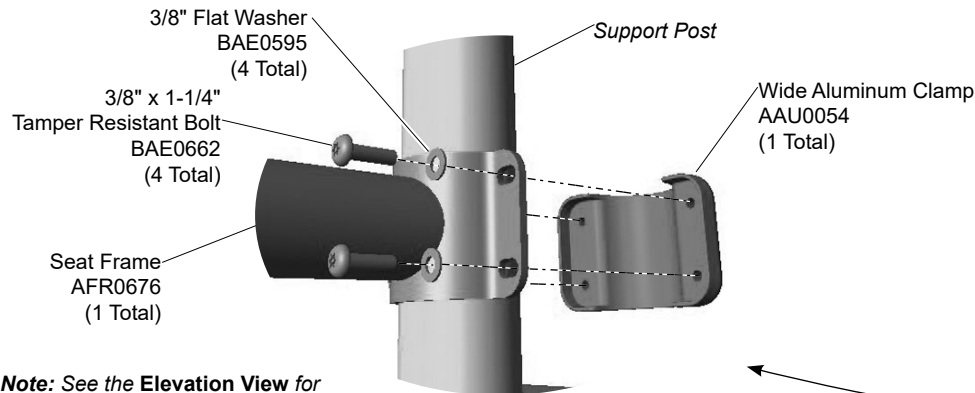


Elevation Views



Installation Instructions

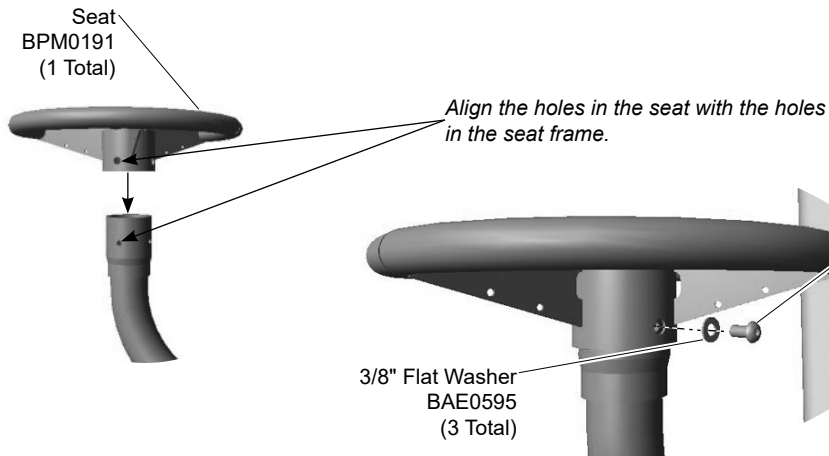
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 4.



Note: See the Elevation View for the minimum and maximum heights that the seat may be mounted.

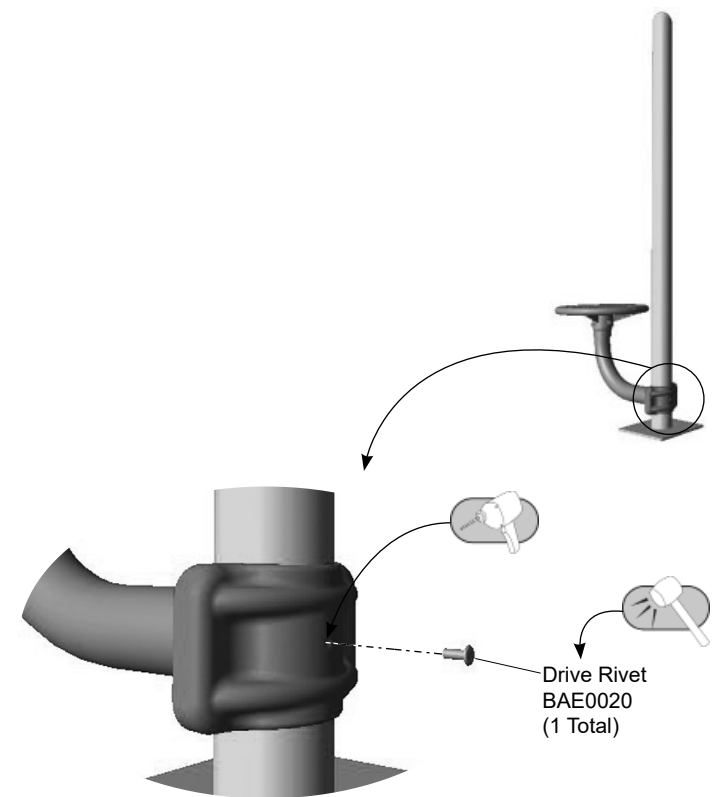
Detail A Step 3

Attach the seat frame to the support post.



Detail B Step 4

Attach the seat to the seat frame.



Detail C Step 6

Secure the clamp to the support post.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Attach the seat frame to the support post. See **Detail A**. Position the seat frame against the support post and attach as shown.

Note: See the **Elevation View** for the minimum and maximum heights that the seat may be mounted.

Step 4: Attach the seat to the seat frame. See **Detail B**. Place the seat on top of the seat frame, align the holes and attach as shown.

Final Details.

Step 5: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 6: Install drive rivets. See **Detail C**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

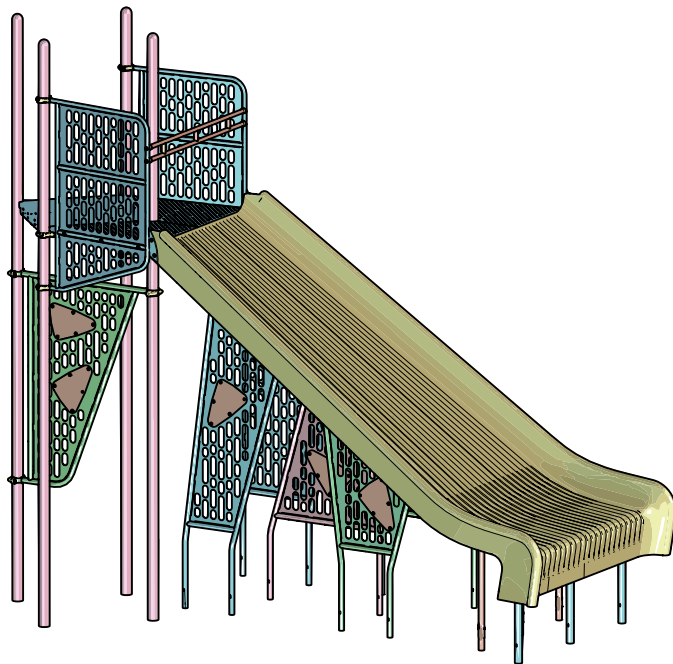
Note: This step should be executed after structure has been assembled and properly footed.

Bill of Materials

CH4578 - FAMILY FURNISHINGS - ANYWHERE SEAT

PART NO.	DESCRIPTION	QTY.
AAU0054	CLAMP - 3-1/2" DIA. x 4-1/2" WIDE ALUMINUM	1
AFR0676	FRAME - 3-1/2" SINGLE POST SEAT	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	1
BAE0595	WASHER - 3/8" SAE FLAT	7
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	3
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	4
BPM0191	SEAT - 3.86" x 17.12" x 17.12"	1





Assembly View (representative model)




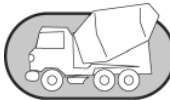
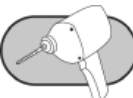

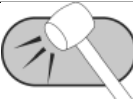
Installation Instructions

Challengers® Models CH4695 and CH4695S
Mighty Descent w/ Prism Pass
In-Ground and Surface Mount

Installation Preparation

Recommended Crew: Three (3) adults
..... *minimum of six (6) adults required for placement of slide
Installation Time (In-Ground): 10 man-hours
Installation Time (Surface Mount): 5 man-hours
Concrete Required: 0.48 cubic yard (0,32 cubic meters)
Use Zone: Refer to Master Layout Drawing
User Group Age (years): ASTM: 2-12, CSA: 1.5-12, EN: 2-14

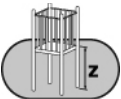
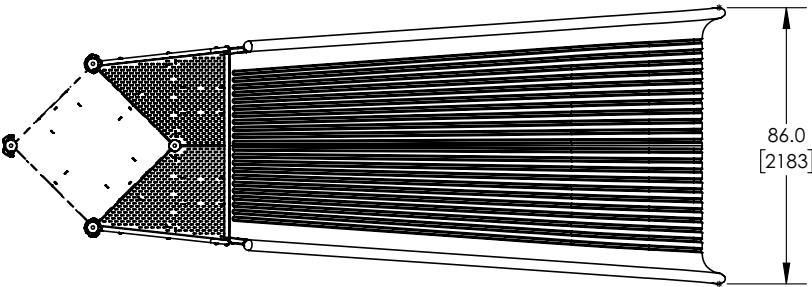
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

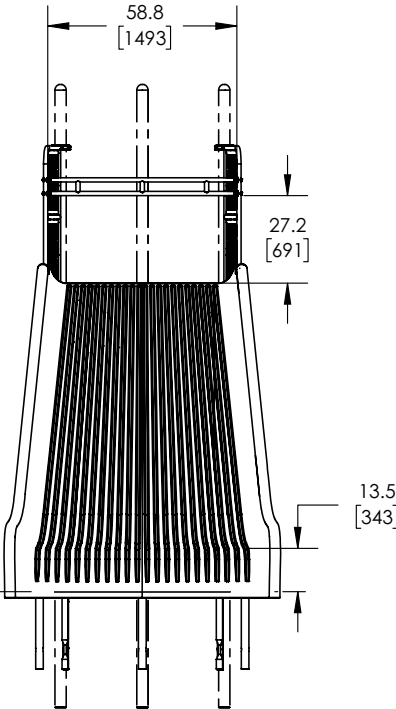
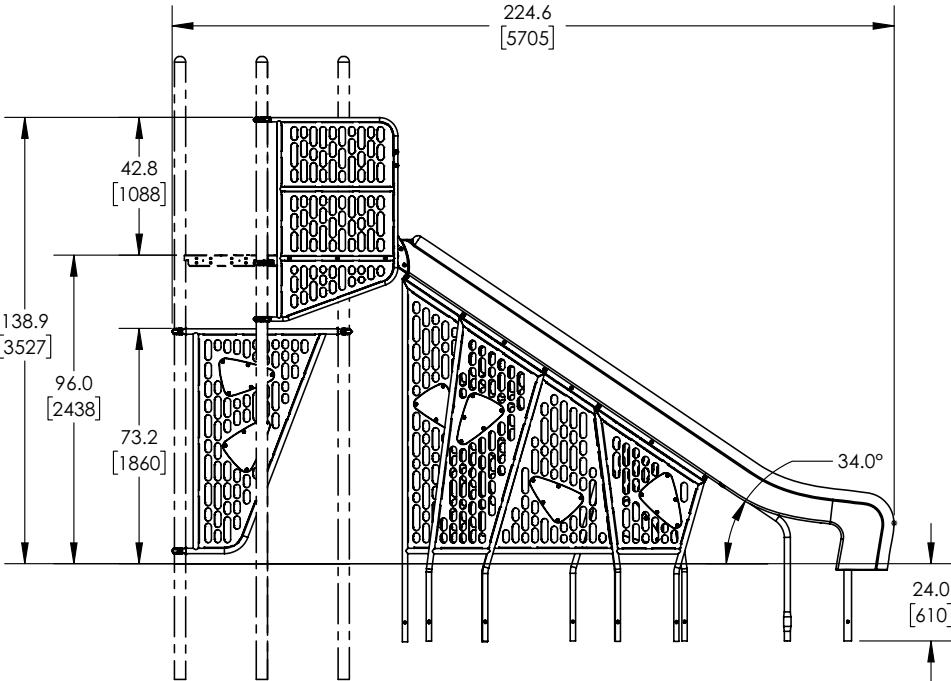
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View



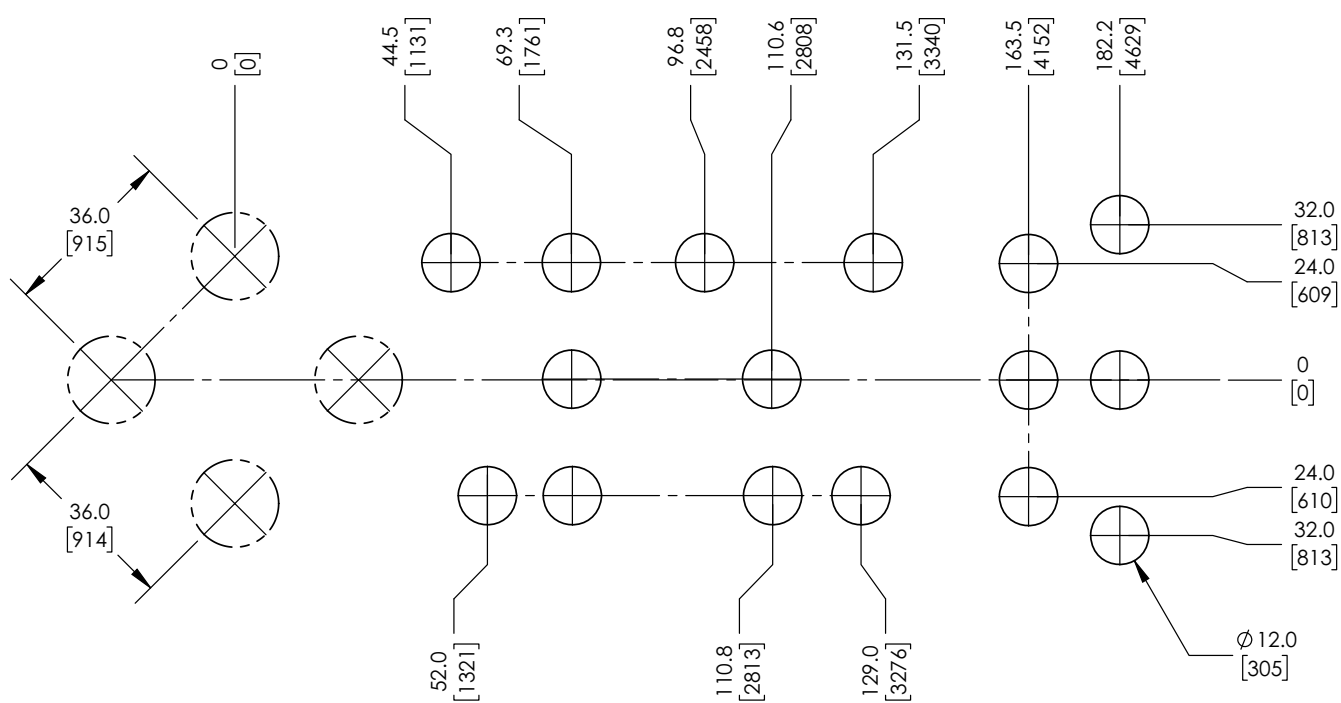
Height of the deck



Elevation Views
CH4695



Installation Instructions



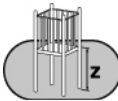
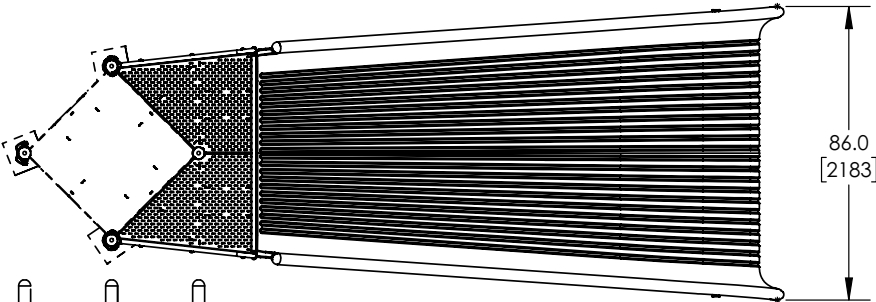
Footing Diagram
CH4695



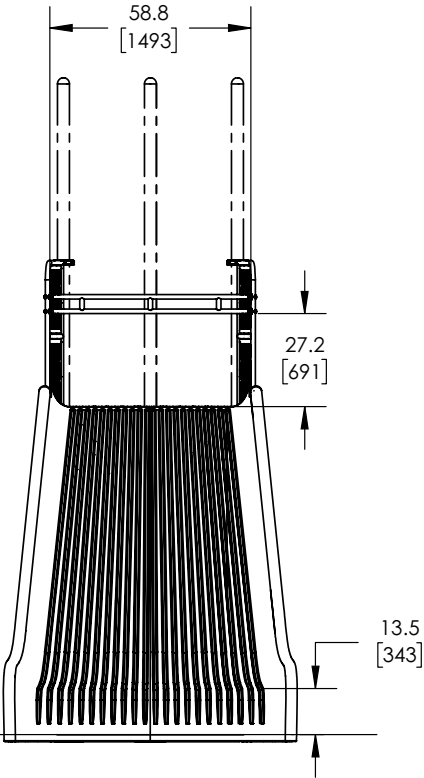
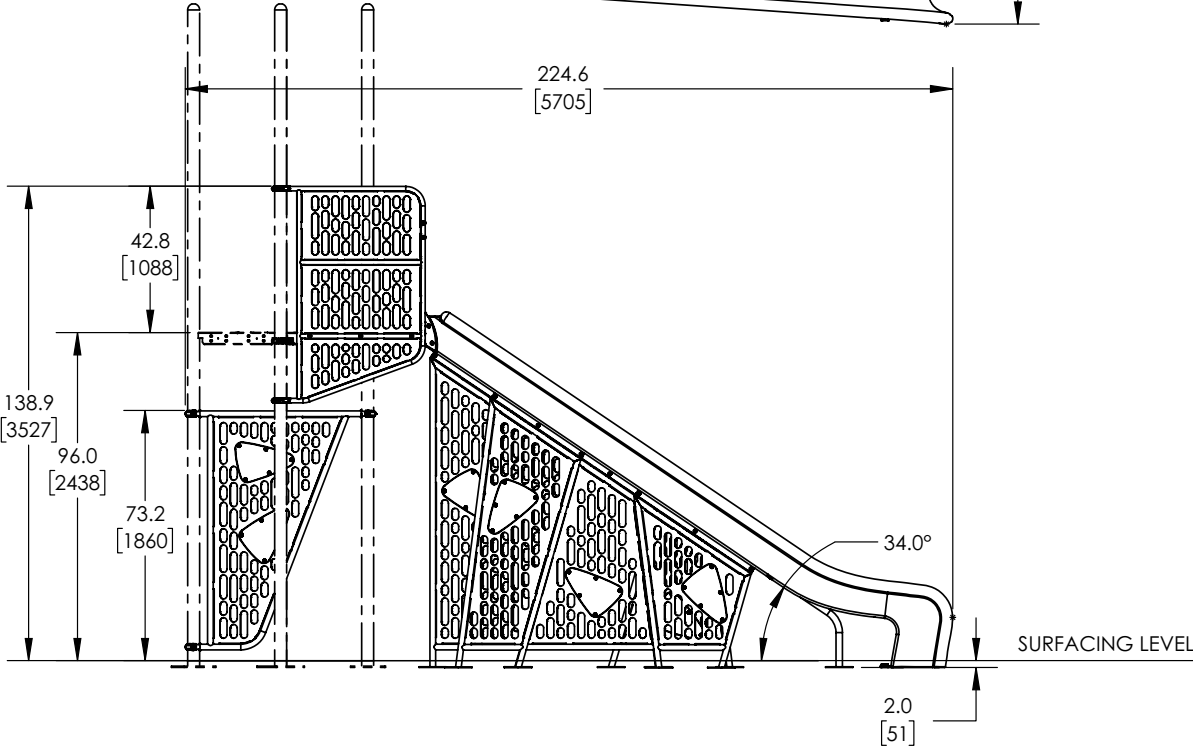
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View



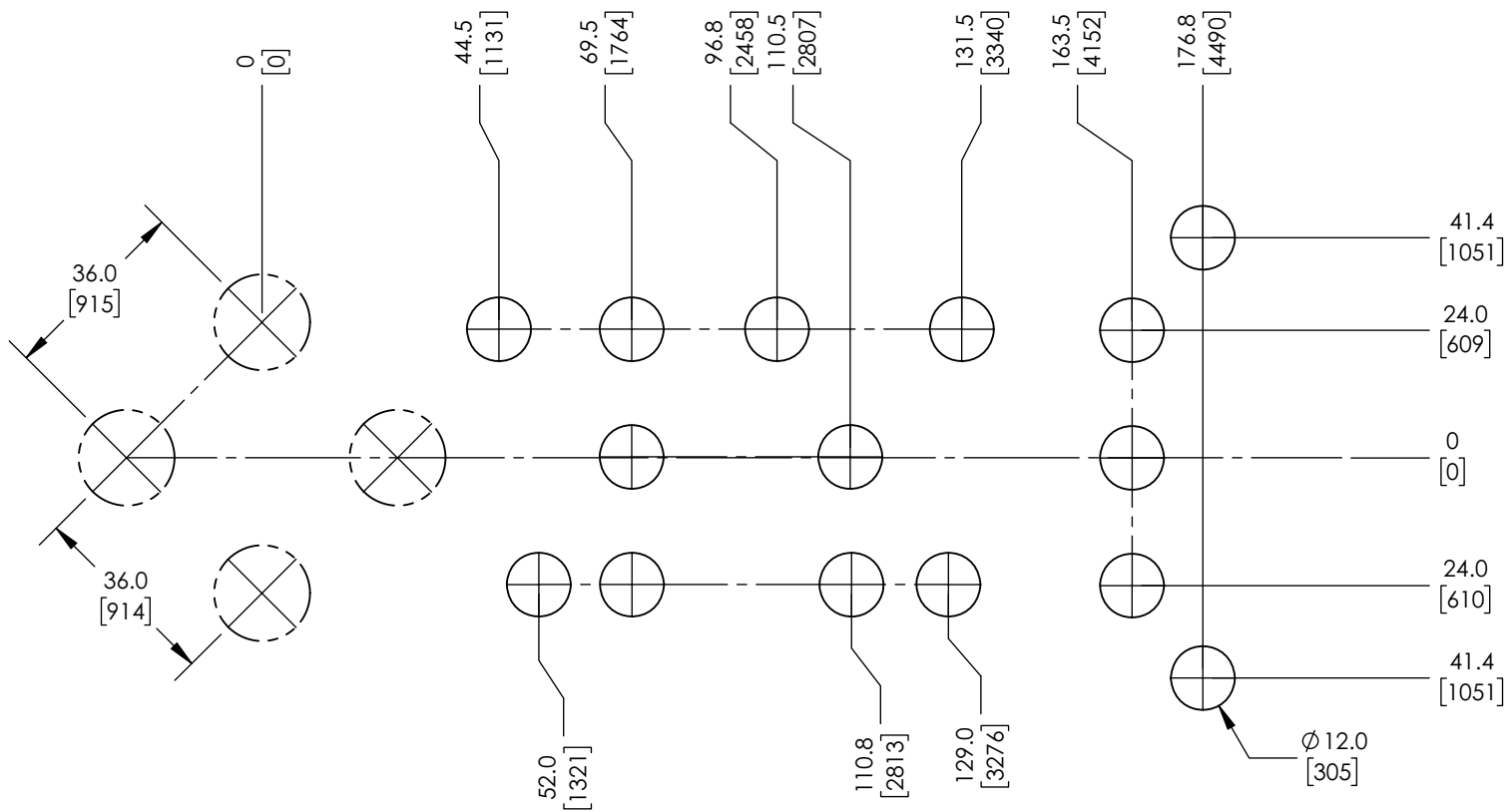
Height of the deck



Elevation Views
CH4695S



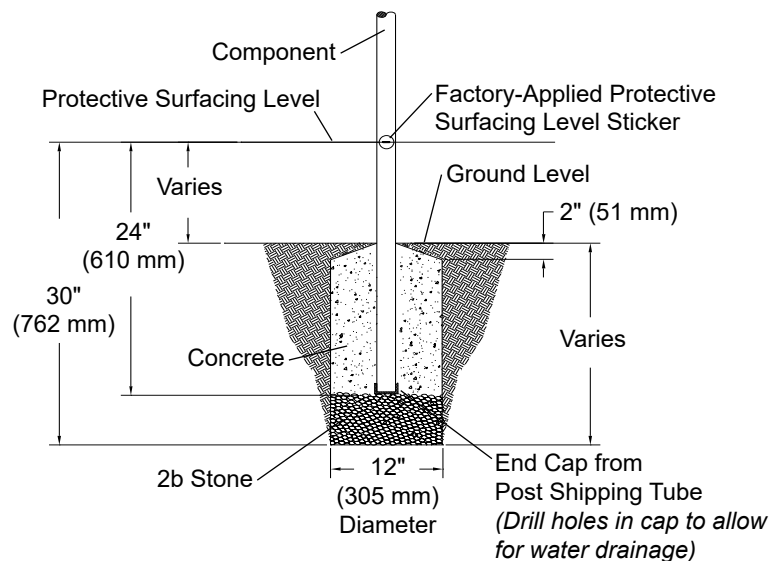
Installation Instructions



Footing Diagram
CH4695S



Installation Instructions



Component Footing Detail (ASTM/CSA)

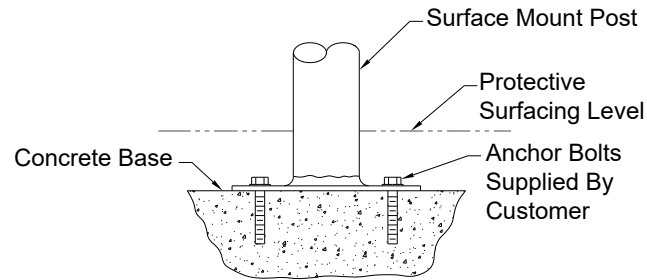
FOOTING NOTES

- Component footing depth equals 30 in. (762 mm) less the depth of the protective surfacing material. The post is designed to have 12" (305 mm) in concrete.

Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 18 in. (457 mm).

- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

Installation Instructions



Surface Mount Footing Detail

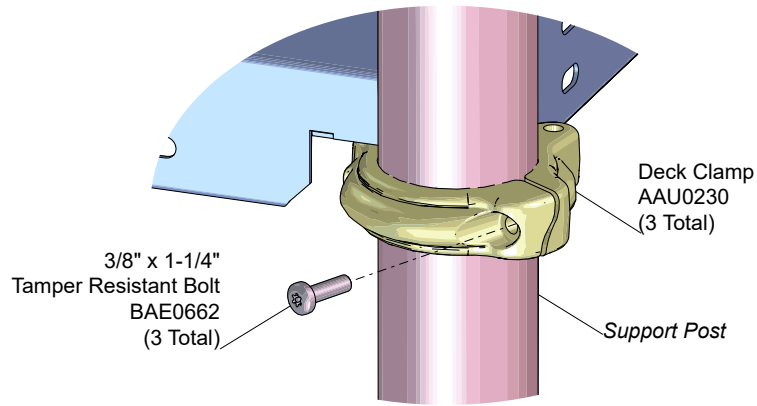
FOOTING NOTES

- All support posts and component support legs may have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Footing size may vary due to local soil and weather conditions.
- Base of footing must be below frost line.
- Comparison of protective surfacing materials is available in [Handbook for Public Playground Safety](#) published by U. S. Consumer Product Safety Commission.

Surface mount hardware is not supplied. Customer is responsible for concrete base and providing surface mount hardware as specified by a registered structural engineer for each specific project application.

Installation Instructions

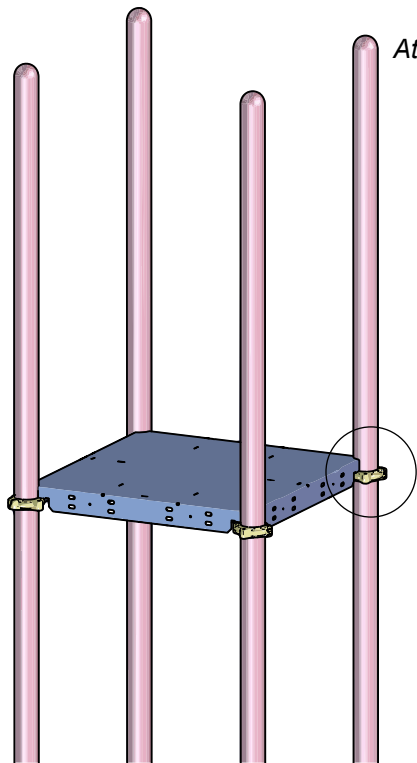
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 21.



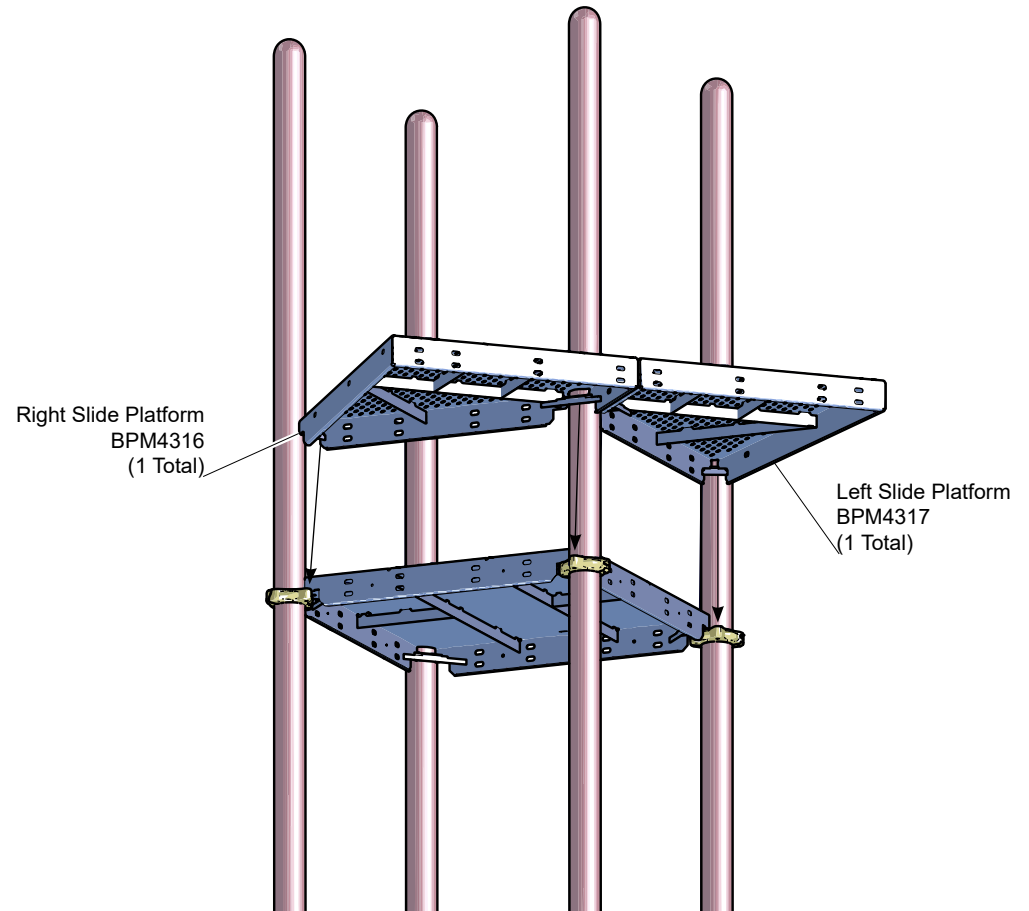
Detail A Step 4



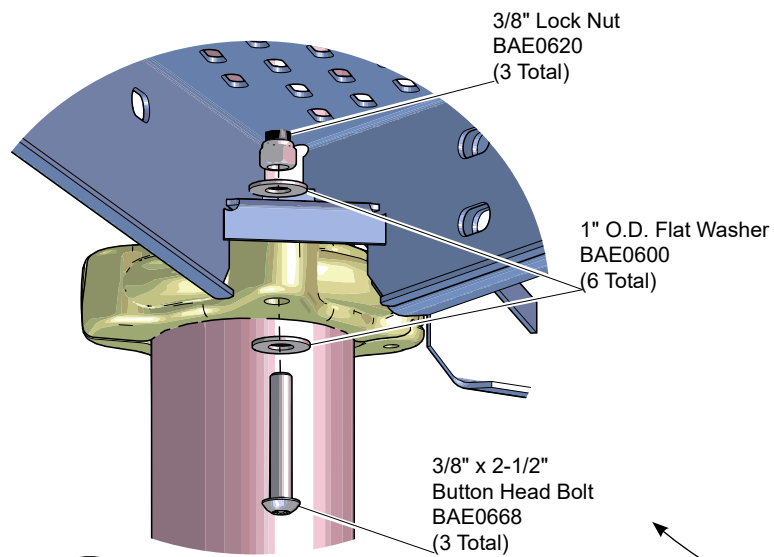
Attach the deck clamps to the existing support posts.



Note: One deck clamp per support post, refer to the Master Layout Drawing for placement.

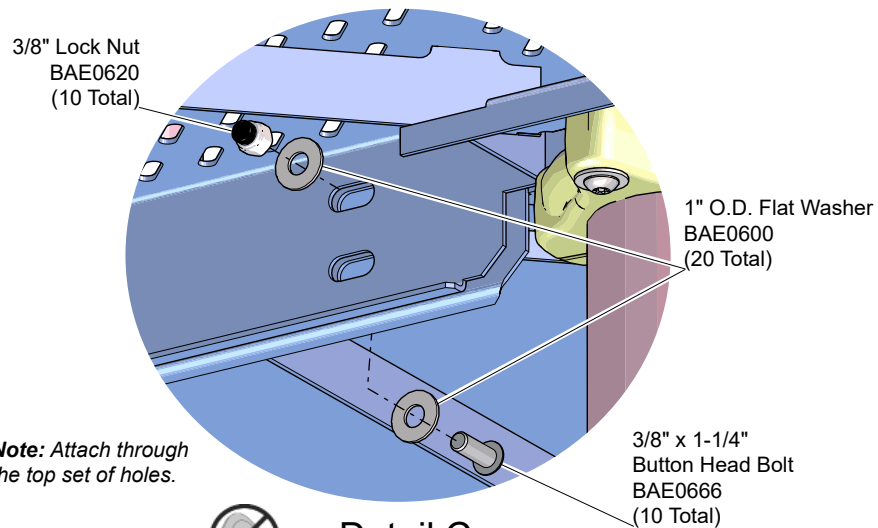


Installation Instructions



Detail B
Step 5

Attach the slide platforms to the deck clamps.

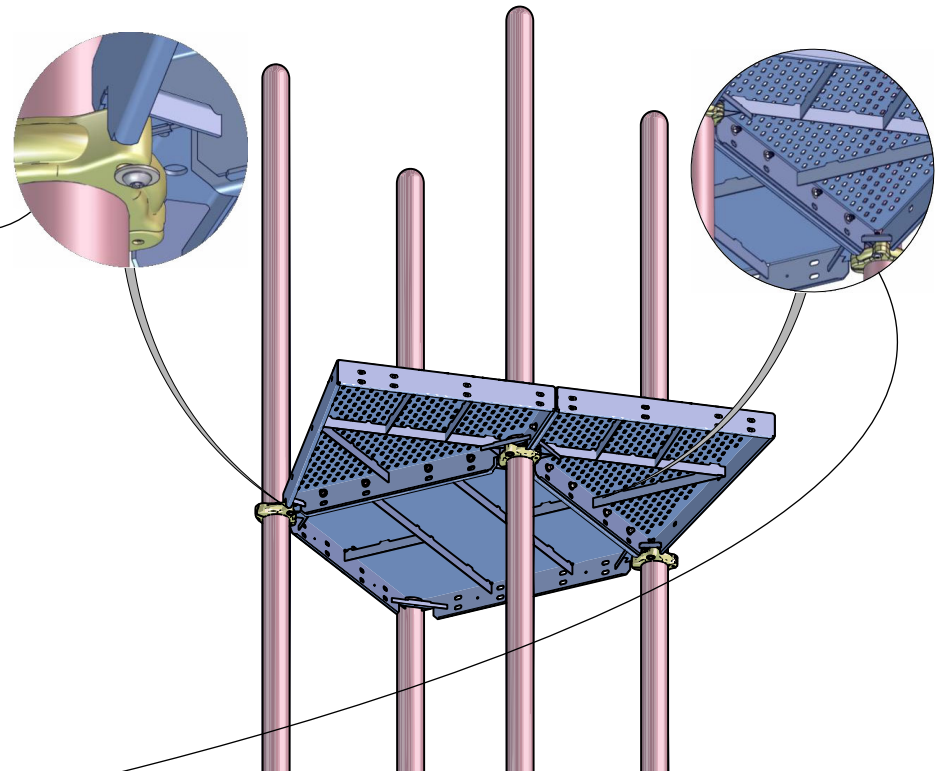


Note: Attach through
the top set of holes.

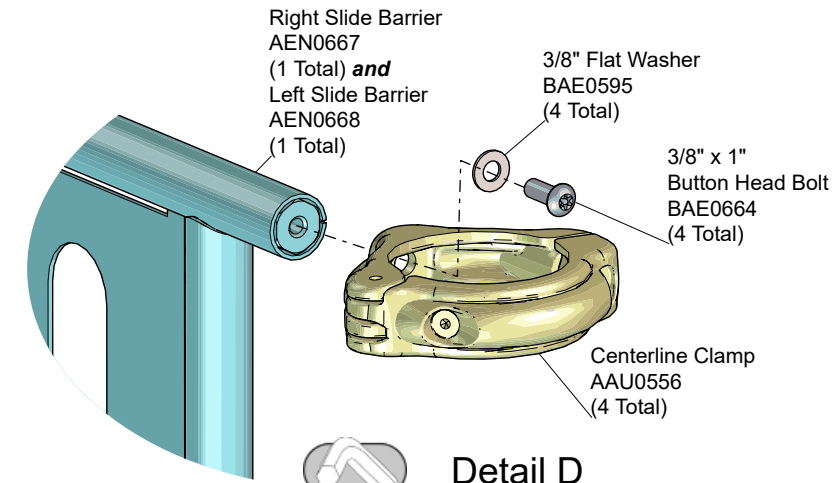


Detail C
Step 6

Attach the side platforms to the existing deck and to each other.

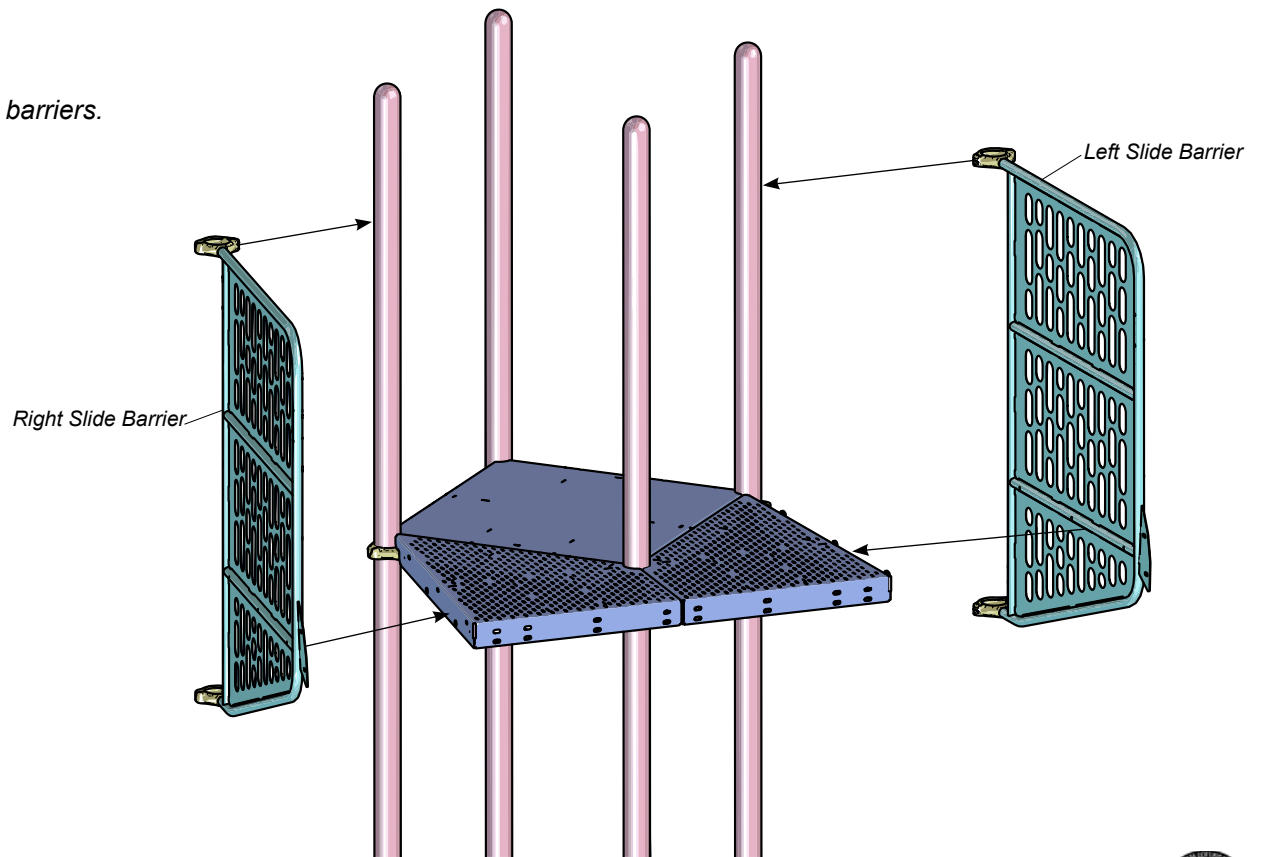
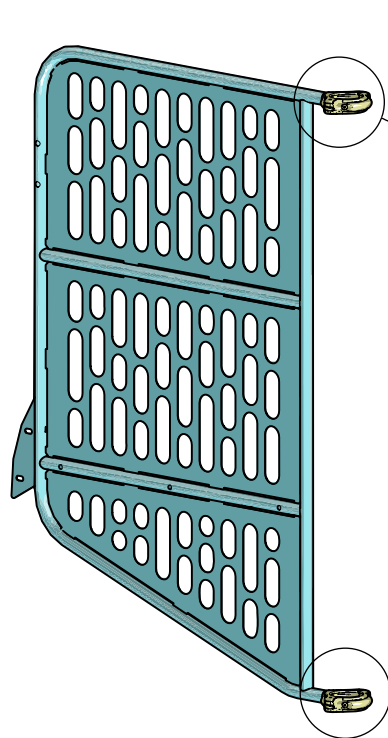


Installation Instructions

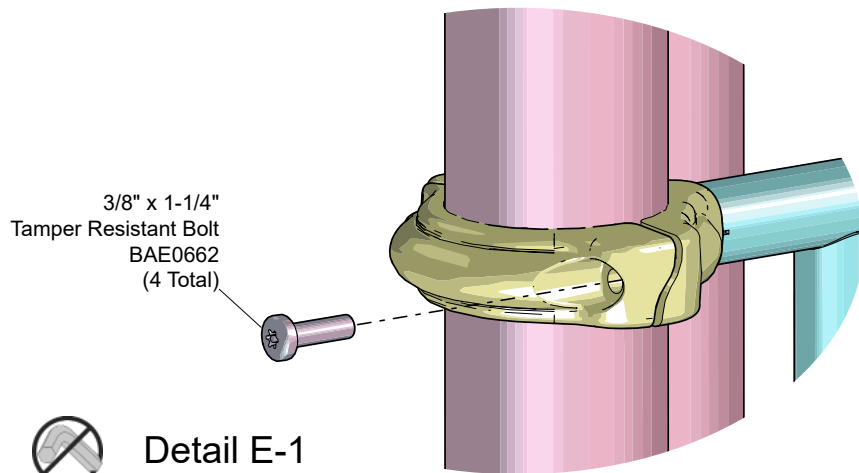


Detail D Step 7

Attach the clamps to the slide barriers.



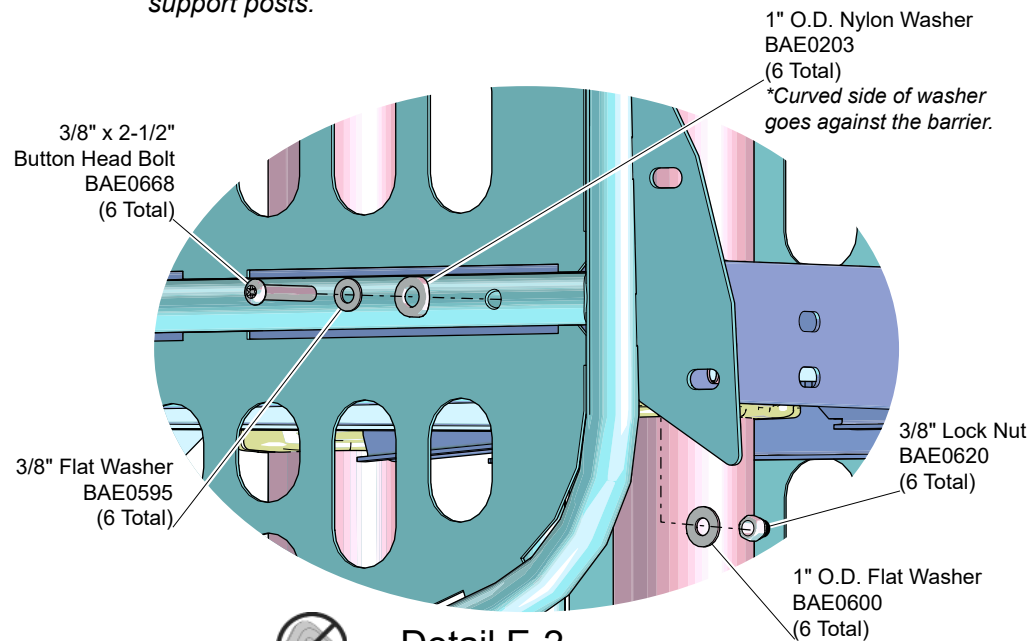
Installation Instructions



Detail E-1

Step 8

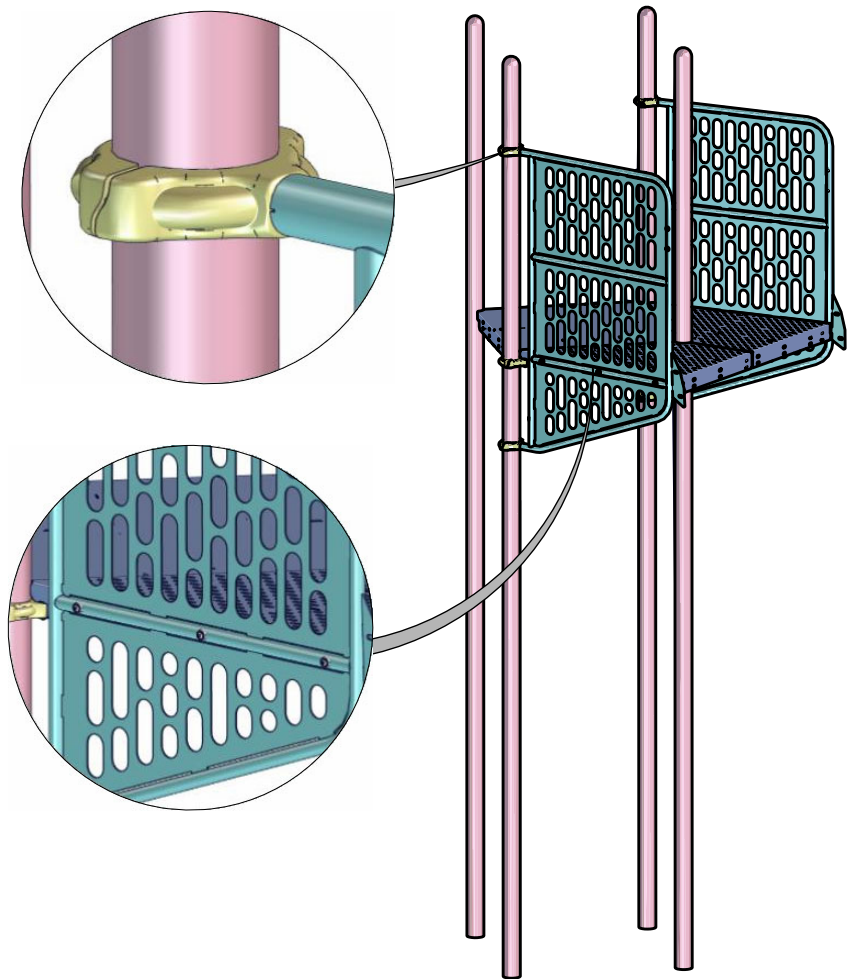
Attach the slide barriers to the support posts.



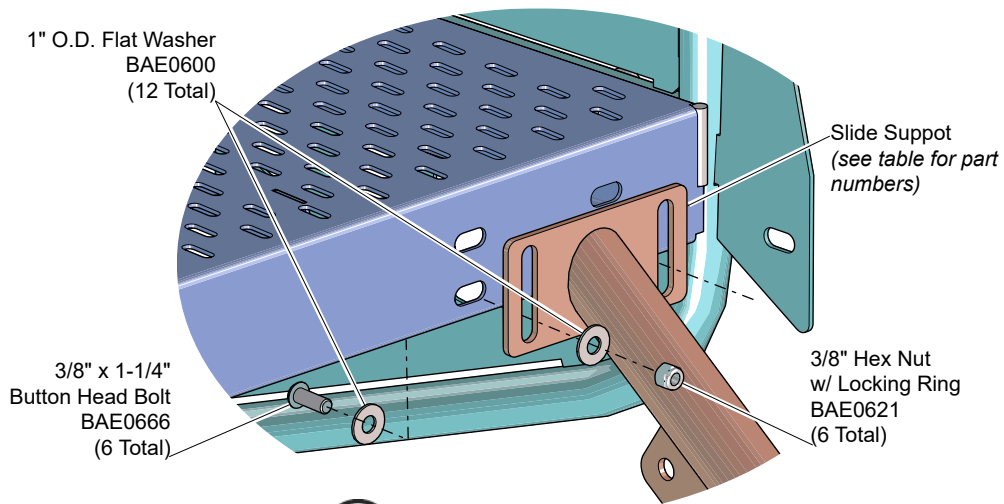
Detail E-2

Step 8

Attach the slide barriers to the slide platforms.



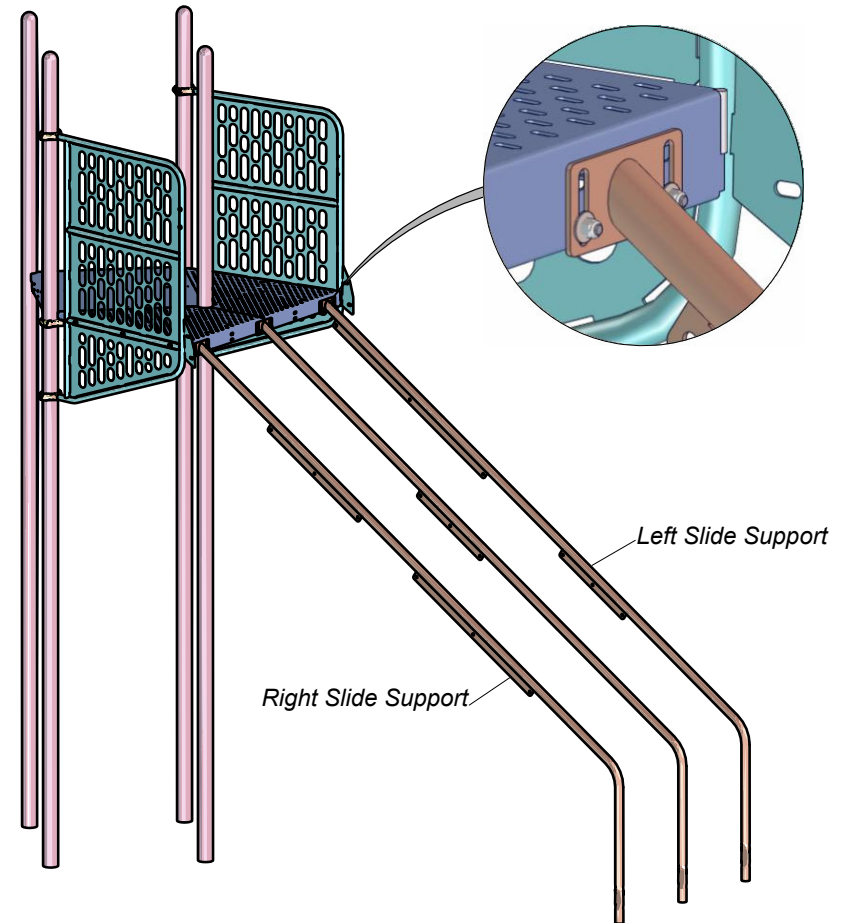
Installation Instructions



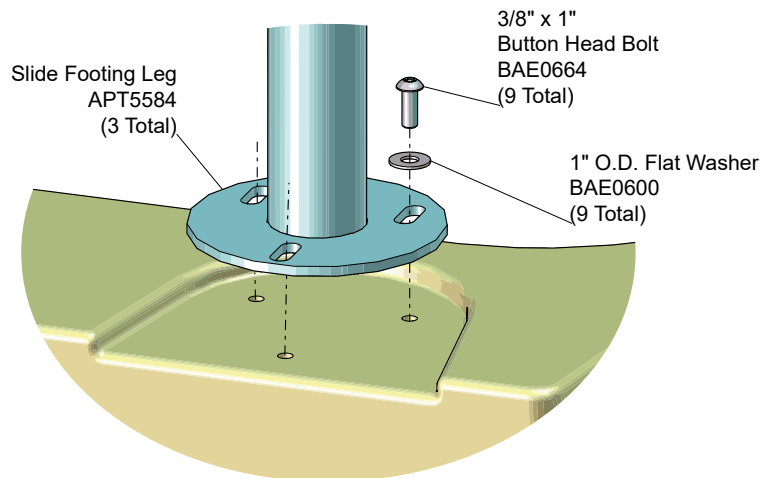
 **Detail F**
Step 9
Attach the slide supports to the platforms.

Important Note: Attach the slide supports to the platforms through the **bottom holes only**.

Slide Support Position	In-Ground Version Part Number	Surface Mount Version Part Number
Left	AFR2513	AFR2512
Middle	AFR2515	AFR2514
Right	AFR2517	AFR2516

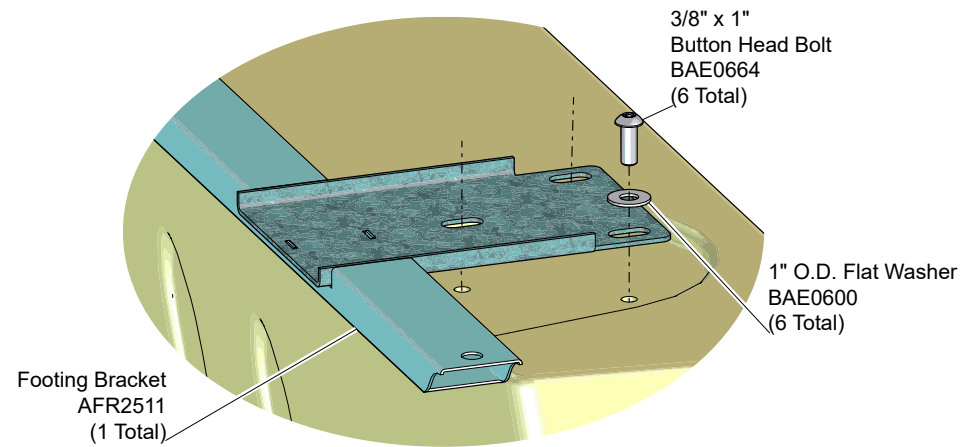
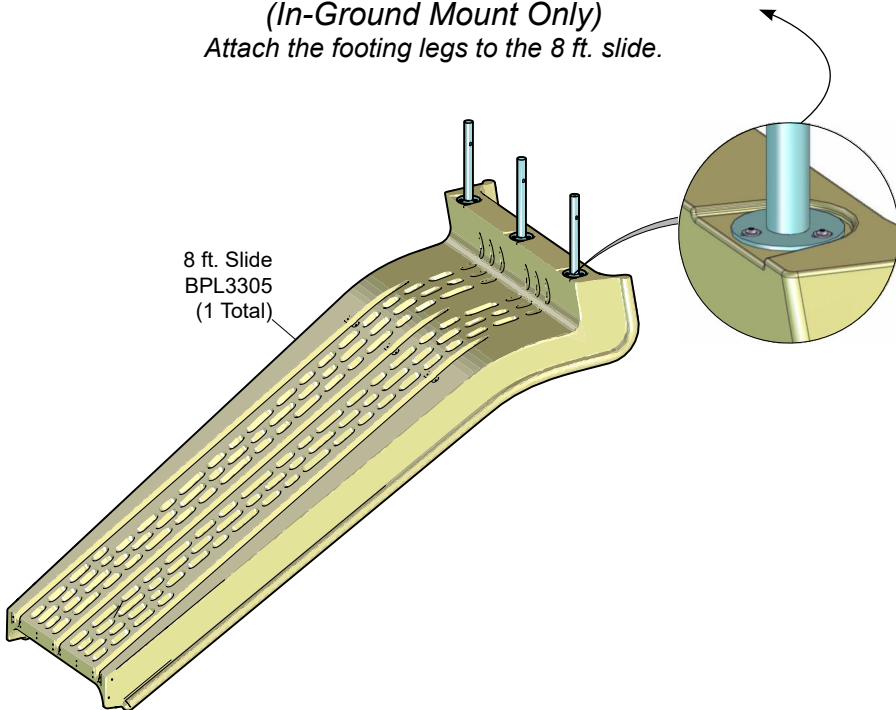


Installation Instructions



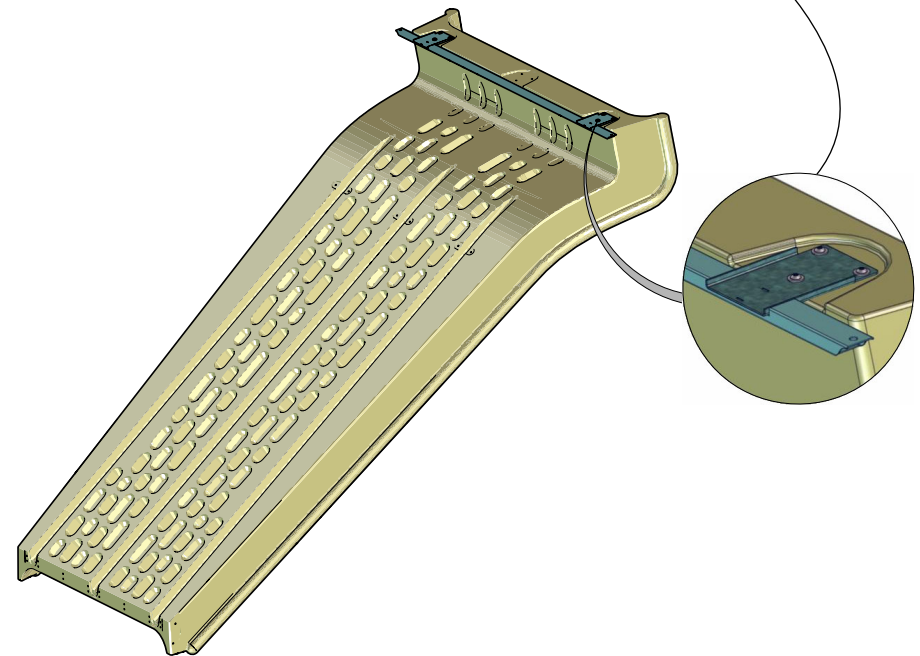
Detail G
Step 10

(In-Ground Mount Only)
Attach the footing legs to the 8 ft. slide.

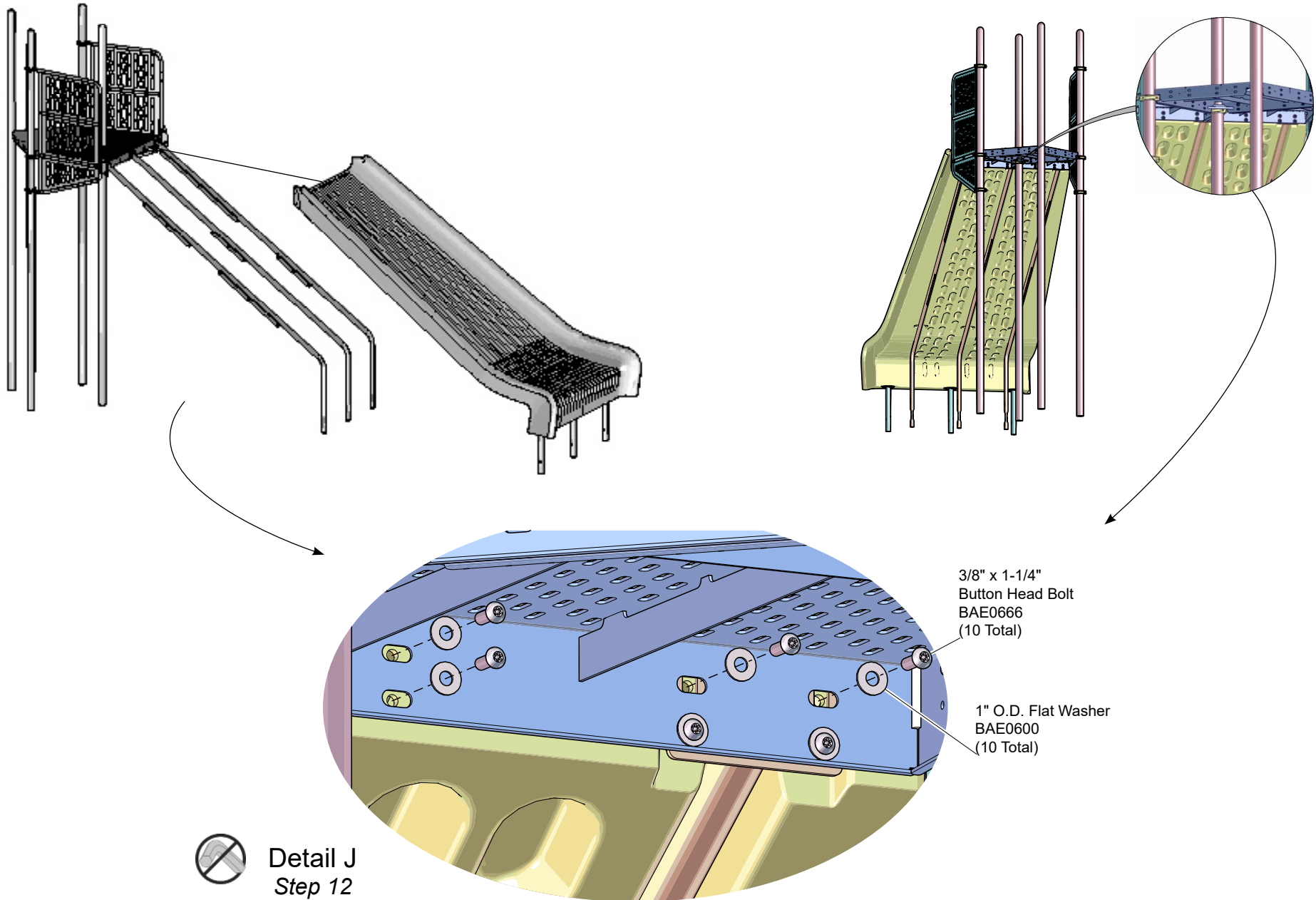


Detail H
Step 11

(Surface Mount Only)
Attach the footing bracket to the 8 ft. slide.



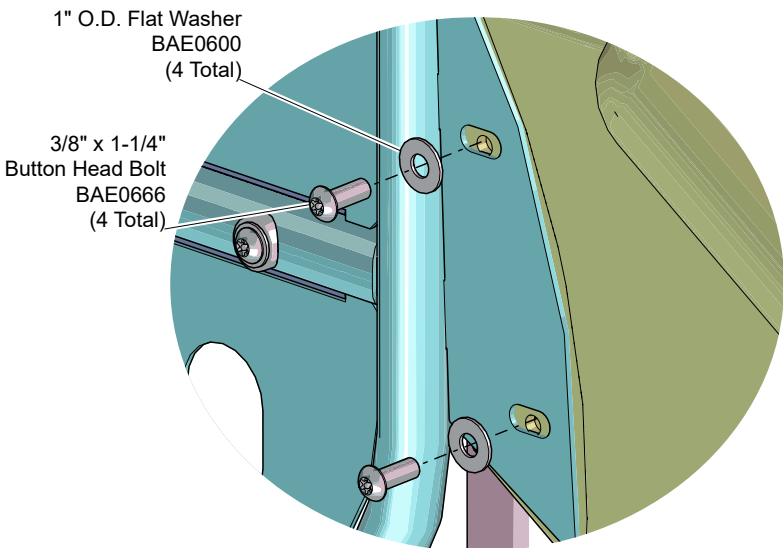
Installation Instructions



Detail J
Step 12

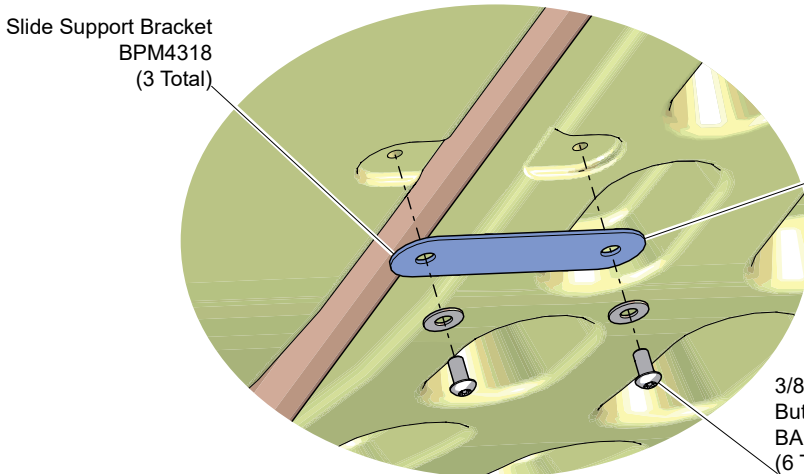
Attach the slide to the platforms

Installation Instructions



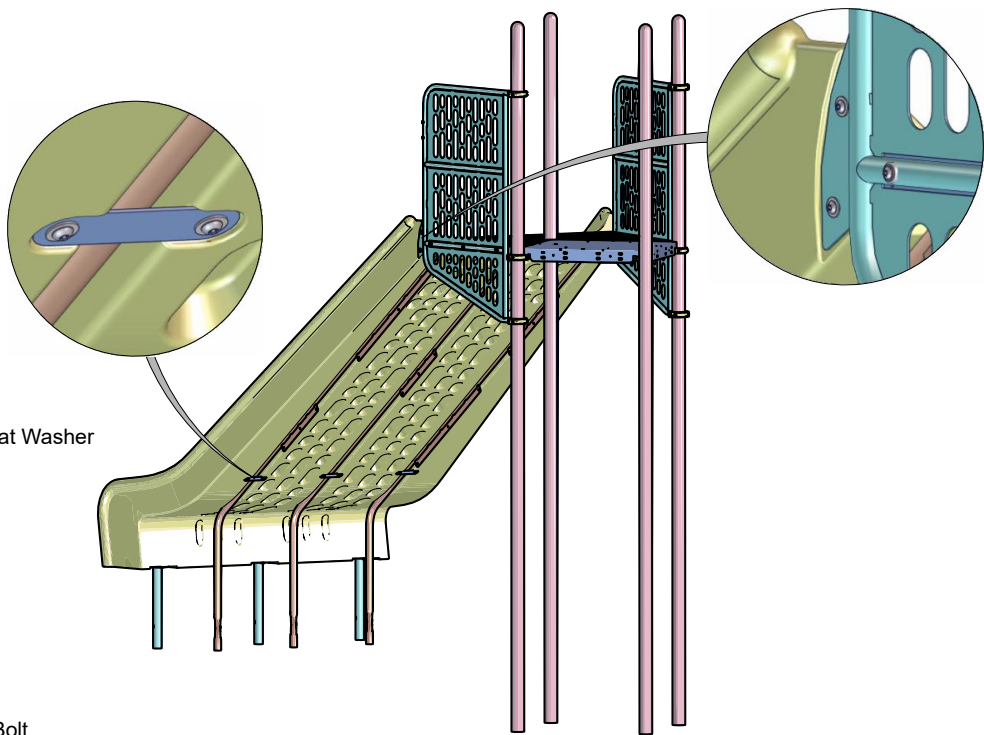
Detail K
Step 13

Attach the slide barriers to the slide.

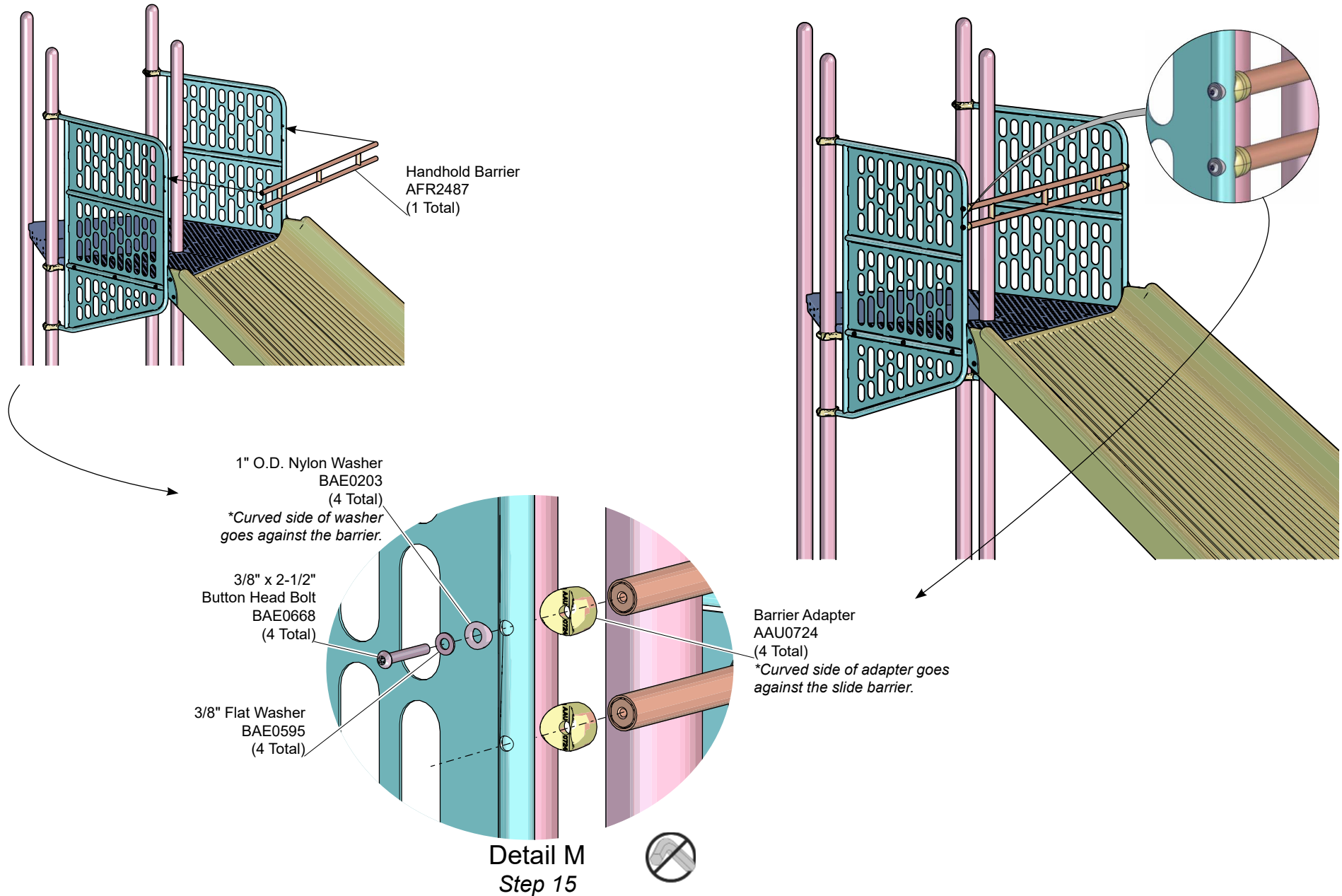


Detail L
Step 14

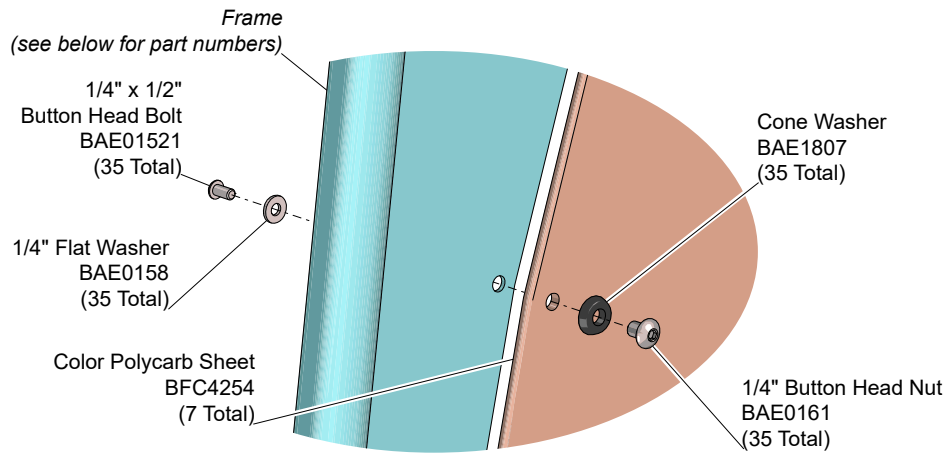
Attach the slide support brackets to the bottom of the slide.



Installation Instructions

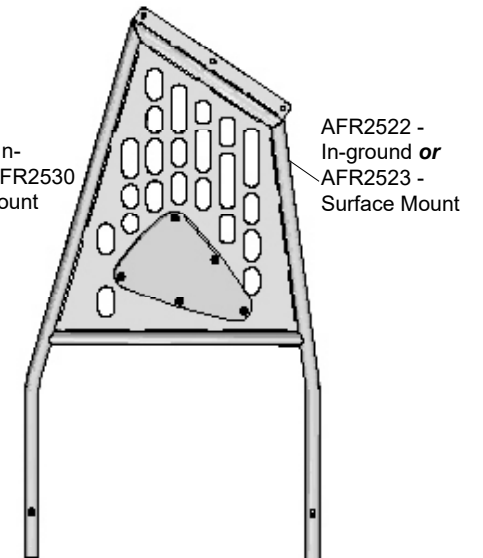
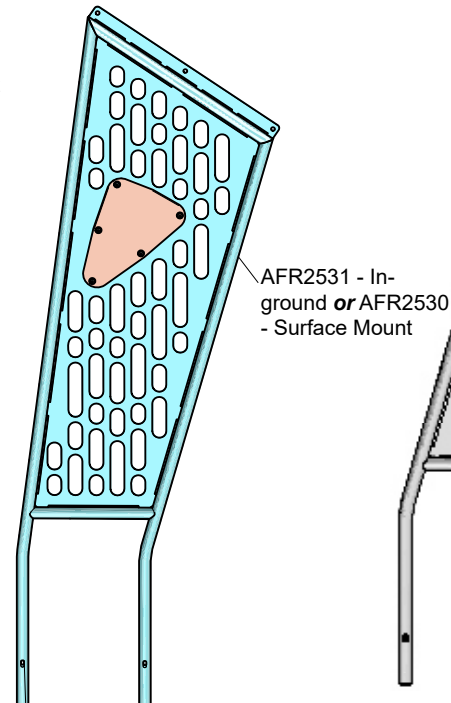
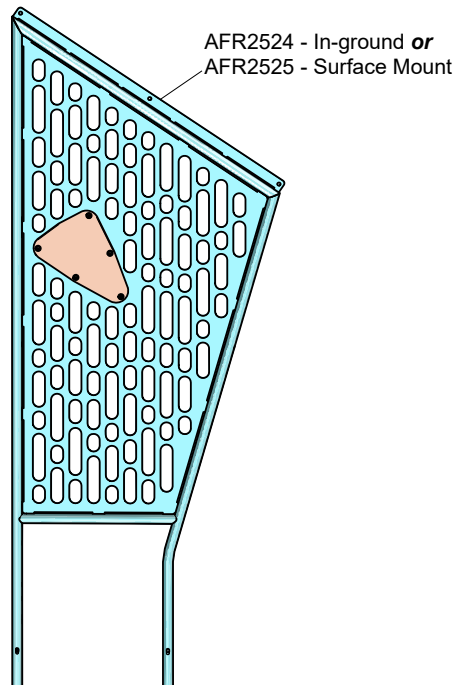
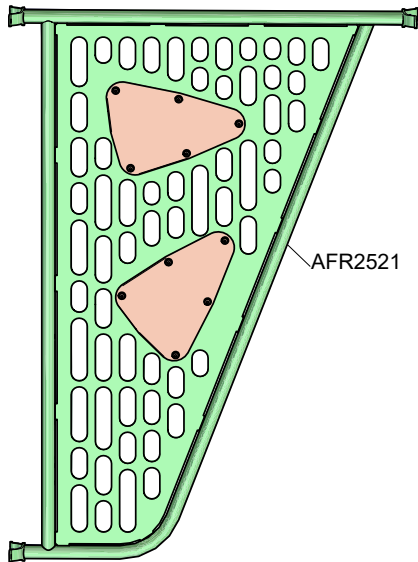
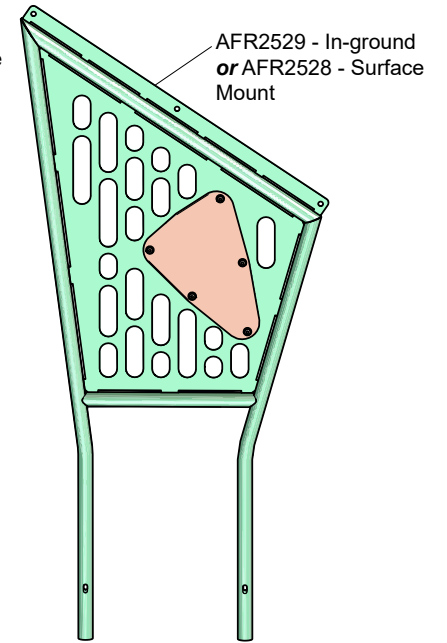
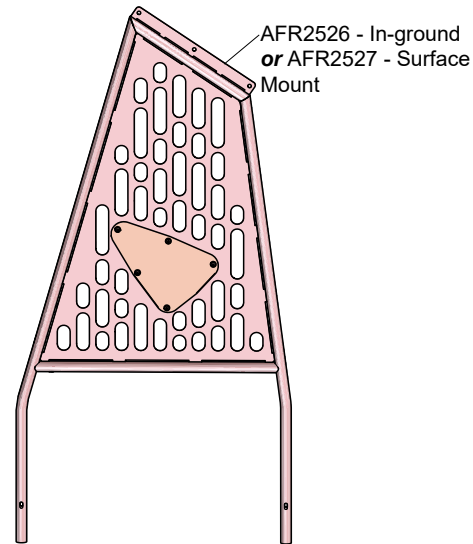


Installation Instructions

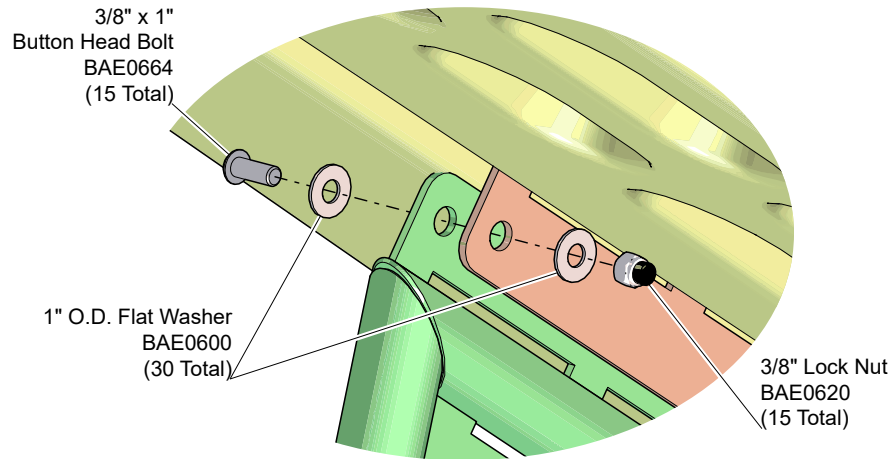


Detail N Step 16

Attach the color Polycarb sheets
to the frames.



Installation Instructions



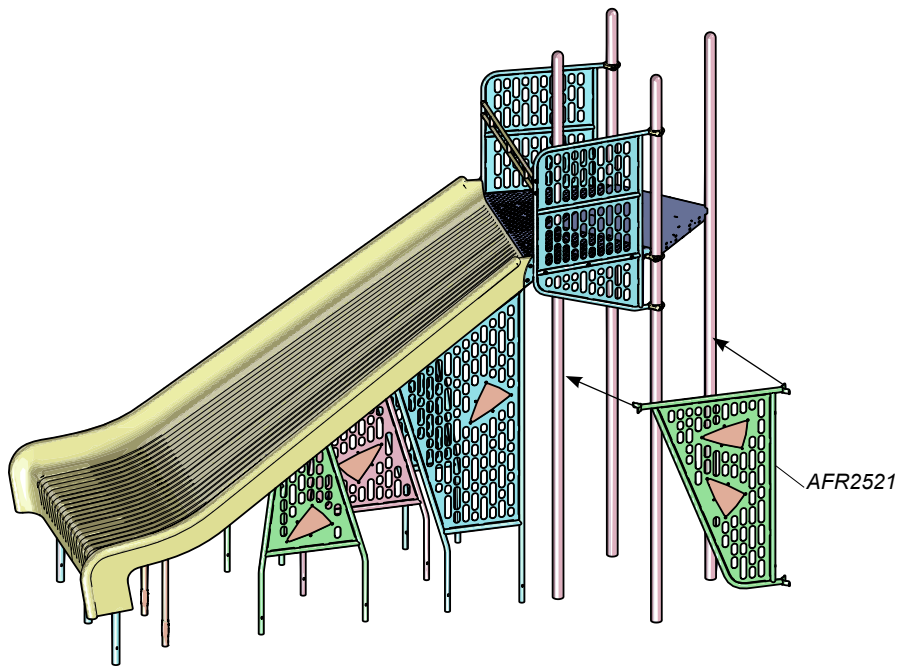
Detail O
Step 17

Attach the frames to the slide supports.

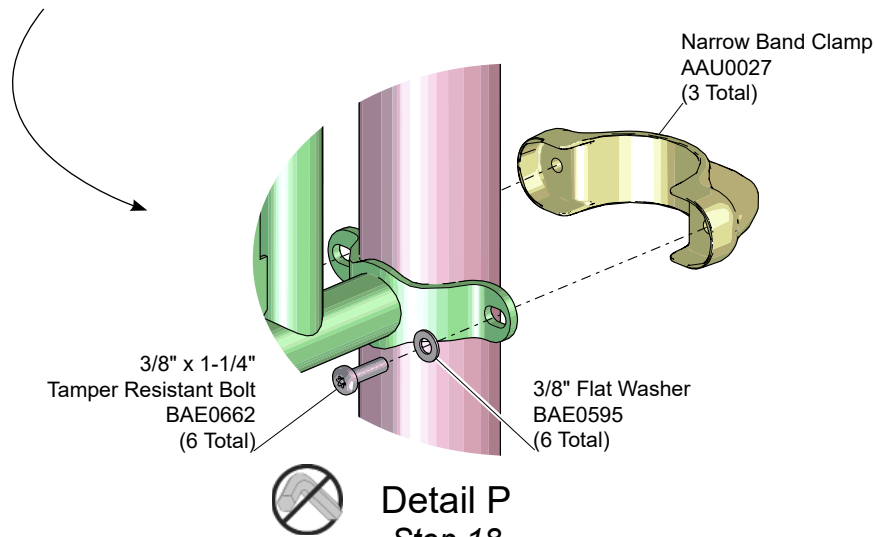
	In-Ground Frames	Surface Mount Frames
Left Slide Support	AFR2524 and AFR2522	AFR2525 and AFR2523
Middle Slide Support	AFR2526	AFR2527
Right Slide Support	AFR2531 and AFR25	AFR2530 and AFR2528



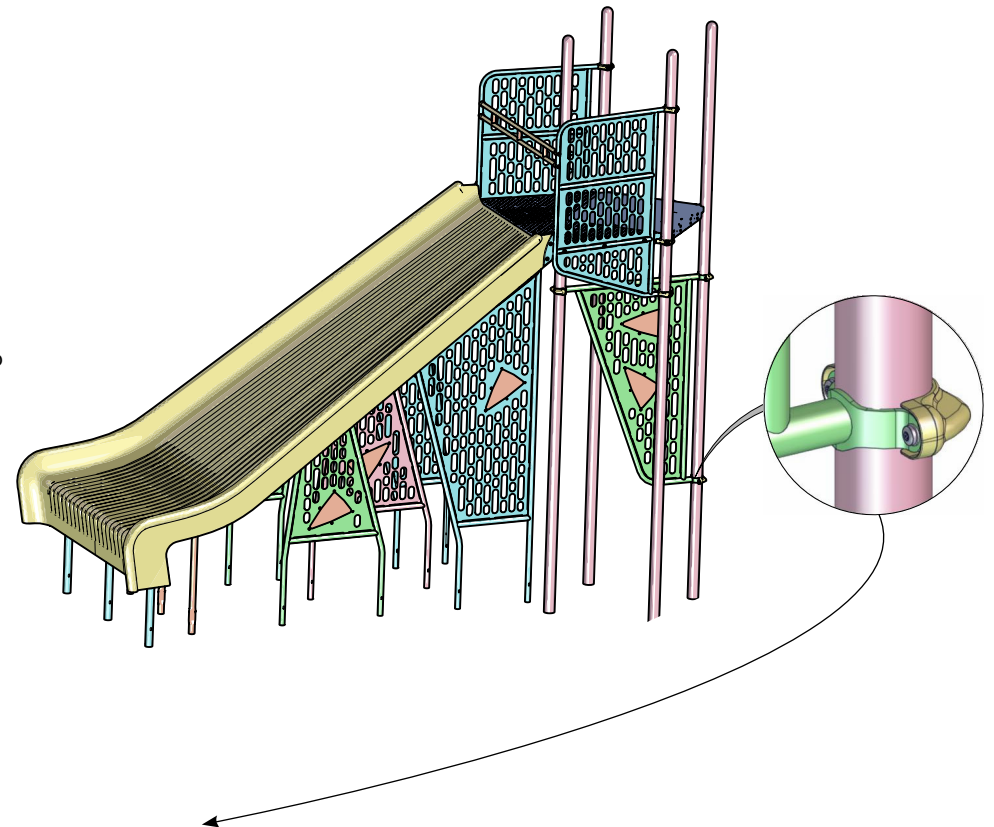
Installation Instructions



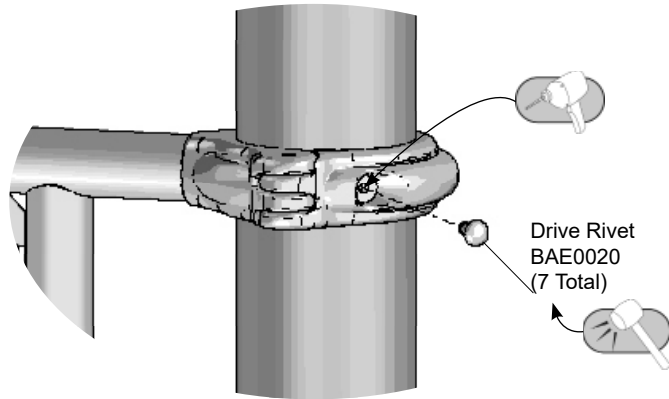
AFR2521



Attach the AFR2521 frame to the support posts.



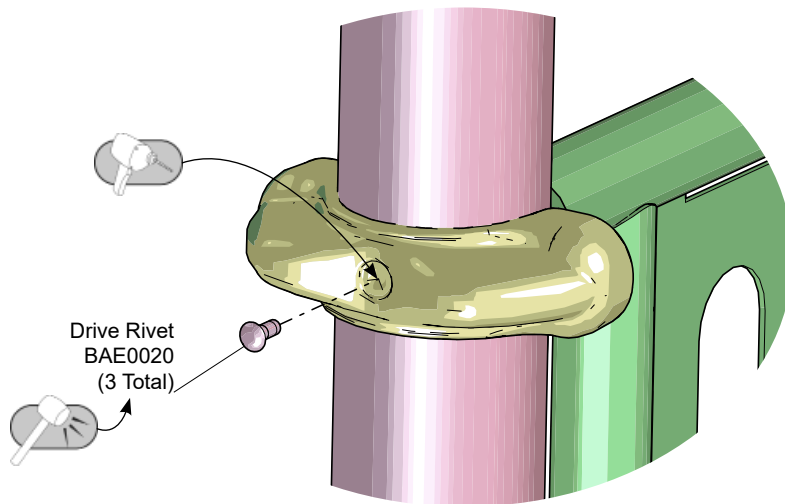
Installation Instructions



Detail Q-1

Step 20

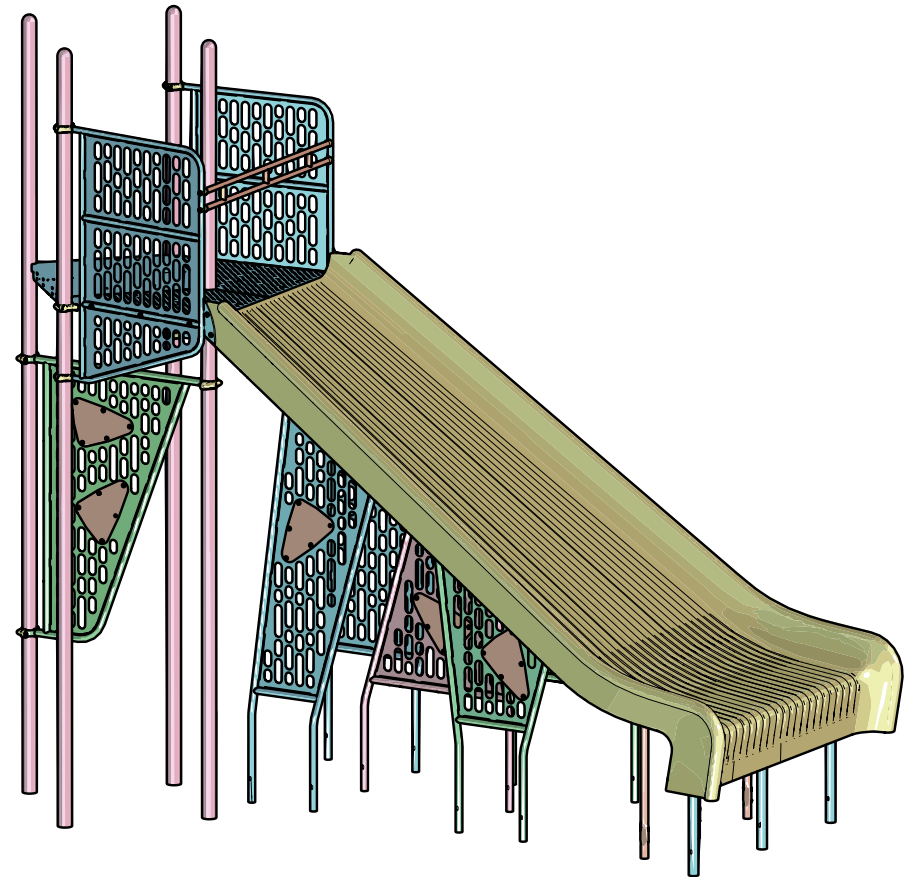
Secure the centerline clamps and deck clamps to the support posts.



Detail Q-2

Step 20

Secure the narrow band clamps to the support posts.



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete unless otherwise instructed.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate or prepare footings as shown in the **Component or Surface Mount Footing Details** on pages 6 and 7 of this installation document.

Step 4: Attach the deck clamps to the existing support posts. See **Detail A**. Close the deck clamps around the support posts, and attach as shown.

Note: One deck clamp per support post, refer to the Master Layout Drawing for placement.

Step 5: Attach the slide platforms to the deck clamps. See **Detail B**. Lower the slide platforms onto the deck clamps, and attach as shown.

Step 6: Attach the slide platforms to the existing deck and to each other. See **Detail C**. Align the holes on the slide platforms with the existing deck, and attach through the top set of holes on the platforms as shown. Attach the slide platforms to each other as shown.

Step 7: Attach the clamps to the slide barriers. See **Detail D**. Place the clamps over the ends of the slide barriers, and attach as shown.

Step 8: Attach the slide barriers to the support posts. See **Details E-1 and E-2**. Position the slide barriers against the sides of the slide platforms. Close the clamps around the support posts, and attach as shown.

Step 9: Attach the slide supports to the platforms. See **Detail F**. Place the bracket end of the slide supports against the platforms, align the holes, and attach as shown.

Important Note: Attach the slide supports to the platforms through the bottom holes only.

Step 10 (In-Ground Mount Only): Attach the footing legs to the 8 ft. slide. See **Detail G**. Position the footing legs on the bottom of the slide, and attach as shown.

Step 11 (Surface Mount Only): Attach the footing bracket to the 8 ft. slide. See **Detail H**. Position the footing bracket to the bottom of the slide, and attach as shown.

Step 12: Attach the slide to the platforms. See **Detail J**. With adequate manpower, position the slide on top of the slide supports and against the platforms, and attach as shown.

Step 13: Attach the slide barriers to the slide. See **Detail K**. With the holes aligned on the side of the slide and the barriers, attach as shown.

Step 14: Attach the slide support brackets to the bottom of the slide. See **Detail L**. Place the slide support bracket against the bottom of the slide, and attach as shown.

Step 15: Attach the handhold barrier to the slide barriers. See **Detail M**. Position the handhold barrier between the slide barriers, and attach as shown.

Step 16: Attach the Polycarb sheets to the frames. See **Detail N**. Place the Color Polycarb sheet against the opening in the frame, align the holes, and attach as shown.

Step 17: Attach the frames to the slide supports. See **Detail O**. Place the frames under the slide, align with the holes on the slide supports, and attach as shown.

Step 18: Attach the AFR2521 frame to the support posts. See **Detail P**. Position the frame between the support posts and attach as shown.

Installation Instructions

Final Details.

Step 19: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

In-ground Mount: Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Surface Mount: Bolt down all surface mount supports in accordance with specifications provided by your registered structural engineer.

Important Note: Surface mount hardware is not supplied. Customer is responsible for concrete base and for providing surface mount hardware as specified by a registered structural engineer for each specific project application.

Step 20: Install drive rivets. See **Details Q-1 and Q-2**. After the equipment assembly is complete, install a drive rivet in each pipe clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.



Bill of Materials

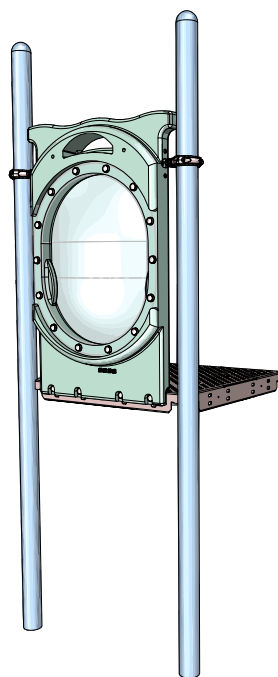
CH4695 - MIGHTY DESCENT W/ PRISM PASS

PART NO.	DESCRIPTION	QTY.
AAU0027	CLAMP - 3.50" NARROW ALUMINUM BAND	3
AAU0230	CLAMP - 3.50" DECK HANGER DIE CAST	3
AAU0556	CLAMP - 3.50" CENTERLINE DIECAST	4
AAU0724	CASTING - 1.315" DIA ADAPTER	4
AEN0667	FRAME - 63.32" x 42.91" x 1.32" (RIGHT)	1
AEN0668	FRAME - 63.32" x 42.91" x 1.32" (LEFT)	1
AFR2487	FRAME - 58.13" x 5.57" x 1.32"	1
AFR2513	FRAME - 122.20" x 119.07" x 5.75" LEFT	1
AFR2515	FRAME - 122.20" x 119.07" x 5.57" MIDDLE	1
AFR2517	FRAME - 122.20" x 119.07" x 5.75" RIGHT	1
AFR2521	FRAME - 70.50" x 50.65" x 6.31"	1
AFR2522	FRAME - 69.97" x 36.39" x 1.66"	1
AFR2524	FRAME - 114.42" x 44.81" x 1.66"	1
AFR2526	FRAME - 85.44" x 42.83" x 8.00"	1
AFR2529	FRAME - 74.01" x 35.11" x 8.00"	1
AFR2531	FRAME - 102.32" x 37.58" x 1.66"	1
APT5584	POST - SLIDE FOOTING	3
BAE0020	RIVET - 1/4" x 11/16" ALUMINUM DRIVE	10
BAE0158	WASHER - 1/4" SAE FLAT	35
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	35
BAE0203	WASHER - NYLON COVERED .53" I.D. x 1.00" O.D.	10
BAE0595	WASHER - 3/8" SAE FLAT	20
BAE0600	1" O.D. x .437" I.D. STAINLESS STEEL FLAT WASHER	103
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	34
BAE0621	NUT - 3/8"-16 ZINC HEX w/ LOCKING RING	6
BAE0659	BOLT - 3/8"-16 x .75" BUTTON HEAD - SS	6
BAE0662	BOLT - 3/8"-16 x 1.25" TAMP RESIST w/TORX DRIVE	13
BAE0664	BOLT - 3/8"-16 x 1.00" BUTTON HEAD - SS	28
BAE0666	BOLT - 3/8"-16 x 1.25" BUTTON HEAD - SS	30
BAE0668	BOLT - 3/8"-16 x 2.50" BUTTON HEAD - SS	13
BAE01521	BOLT - 1/4"-20 x .50" BUTTON HEAD - SS	35
BAE1807	CONE WASHER - .89" O.D. x .39" I.D. x .20"	35
BFC4254	COLOR POLYCARB - 17.63" x 11.55" x .25"	7
BPL3305	SLIDE - 8' DISTINCTIVE	1
BPM4316	PLATFORM - DISTINCTIVE SLIDE (CH) (RIGHT)	1
BPM4317	PLATFORM - DISTINCTIVE SLIDE (CH) (LEFT)	1
BPM4318	SHEET METAL - 6.75" x 1.75" x 12GA	3

CH4695S - MIGHTY DESCENT W/ PRISM PASS SURFACE MOUNT

PART NO.	DESCRIPTION	QTY.
AAU0027	CLAMP - 3.50" NARROW ALUMINUM BAND	3
AAU0230	CLAMP - 3.50" DECK HANGER DIE CAST	3
AAU0556	CLAMP - 3.50" CENTERLINE DIECAST	4
AAU0724	CASTING - 1.315" DIA ADAPTER	4
AEN0667	FRAME - 63.32" x 42.91" x 1.32" (RIGHT)	1
AEN0668	FRAME - 63.32" x 42.91" x 1.32" (LEFT)	1
AFR2487	FRAME - 58.13" x 5.57" x 1.32"	1
AFR2511	FRAME - 84.00" x 8.75" x 1.00"	1
AFR2512	FRAME - 125.07" x 97.07" x 8.00" LEFT	1
AFR2514	FRAME - 125.07" x 97.07" x 8.00" MIDDLE	1
AFR2516	FRAME - 125.07" x 97.07" x 8.00" RIGHT	1
AFR2521	FRAME - 70.50" x 50.65" x 6.31"	1
AFR2523	FRAME - 47.97" x 42.73" x 8.00"	1
AFR2525	FRAME - 92.17" x 47.98" x 8.00"	1
AFR2527	FRAME - 63.44" x 49.06" x 8.00"	1
AFR2528	FRAME - 52.01" x 35.11" x 8.00"	1
AFR2530	FRAME - 80.32" x 40.13" x 8.00"	1
BAE0020	RIVET - 1/4" x 11/16" ALUMINUM DRIVE	10
BAE0158	WASHER - 1/4" SAE FLAT	35
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	35
BAE0203	WASHER - NYLON COVERED .53" I.D. x 1.00" O.D.	10
BAE0595	WASHER - 3/8" SAE FLAT	20
BAE0600	1" O.D. x .437" I.D. STAINLESS STEEL FLAT WASHER	100
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	34
BAE0621	NUT - 3/8"-16 ZINC HEX w/ LOCKING RING	6
BAE0659	BOLT - 3/8"-16 x .75" BUTTON HEAD - SS	6
BAE0662	BOLT - 3/8"-16 x 1.25" TAMP RESIST w/TORX DRIVE	13
BAE0664	BOLT - 3/8"-16 x 1.00" BUTTON HEAD - SS	25
BAE0666	BOLT - 3/8"-16 x 1.25" BUTTON HEAD - SS	30
BAE0668	BOLT - 3/8"-16 x 2.50" BUTTON HEAD - SS	13
BAE01521	BOLT - 1/4"-20 x .50" BUTTON HEAD - SS	35
BAE1807	CONE WASHER - .89" O.D. x .39" I.D. x .20"	35
BFC4254	COLOR POLYCARB - 17.63" x 11.55" x .25"	7
BPL3305	SLIDE - 8' DISTINCTIVE	1
BPM4316	PLATFORM - DISTINCTIVE SLIDE (CH) (RIGHT)	1
BPM4317	PLATFORM - DISTINCTIVE SLIDE (CH) (LEFT)	1
BPM4318	SHEET METAL - 6.75" x 1.75" x 12GA	3





Assembly View


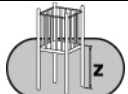

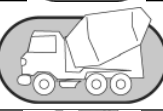


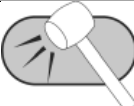
Installation Instructions

Challengers® Model CH4811
Oval Bubble Panel
Deck Mount

Installation Preparation

Recommended Crew: Two (2) adults
Installation Time: 1 man-hour
Use Zone: Refer to Master Drawing
User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

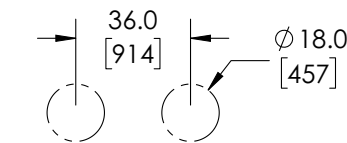
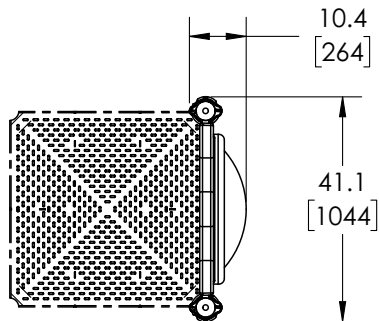
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

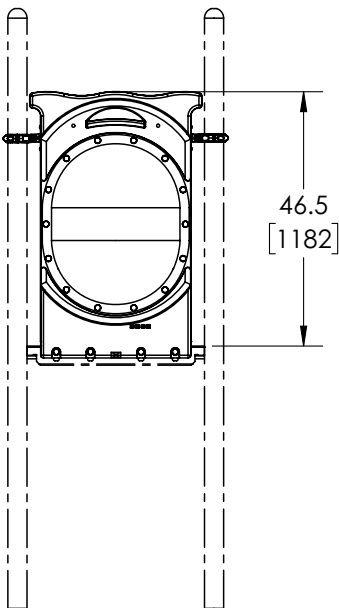
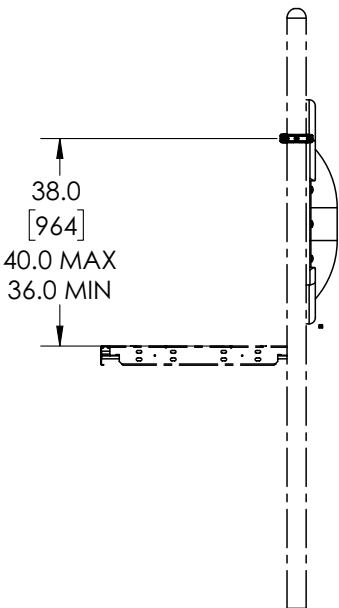
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View



Footings Diagram

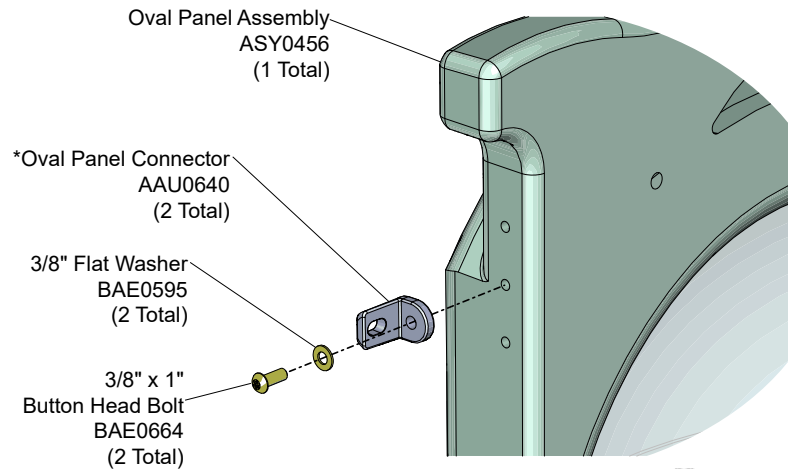


Elevation Views



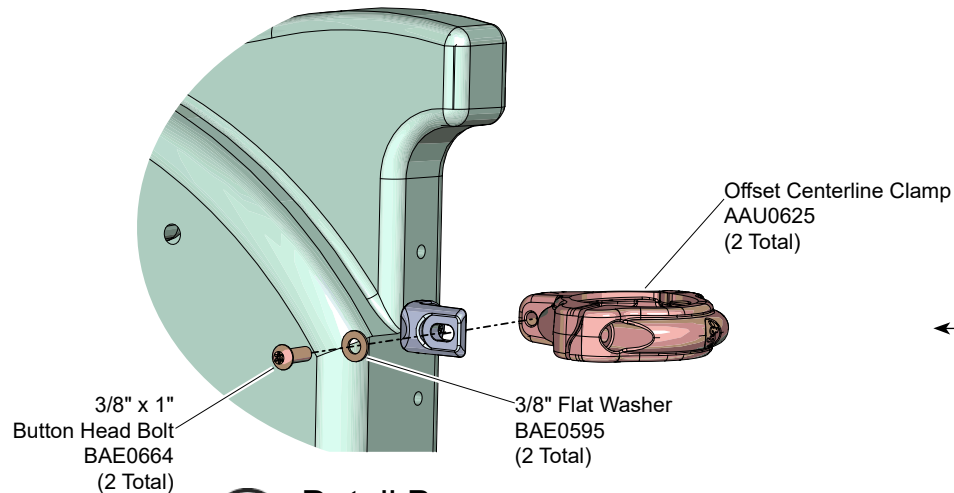
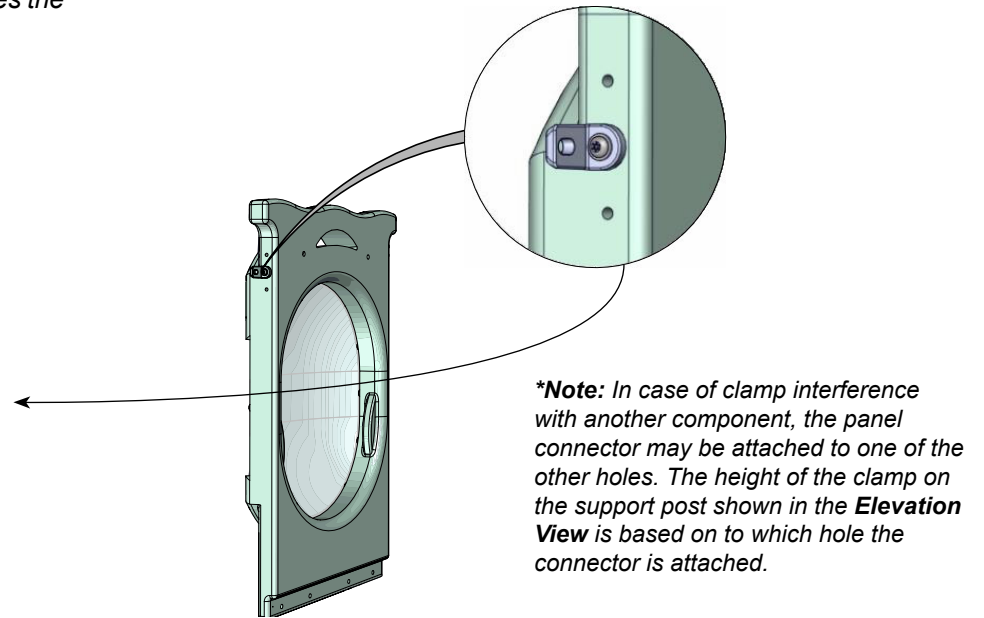
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 7.



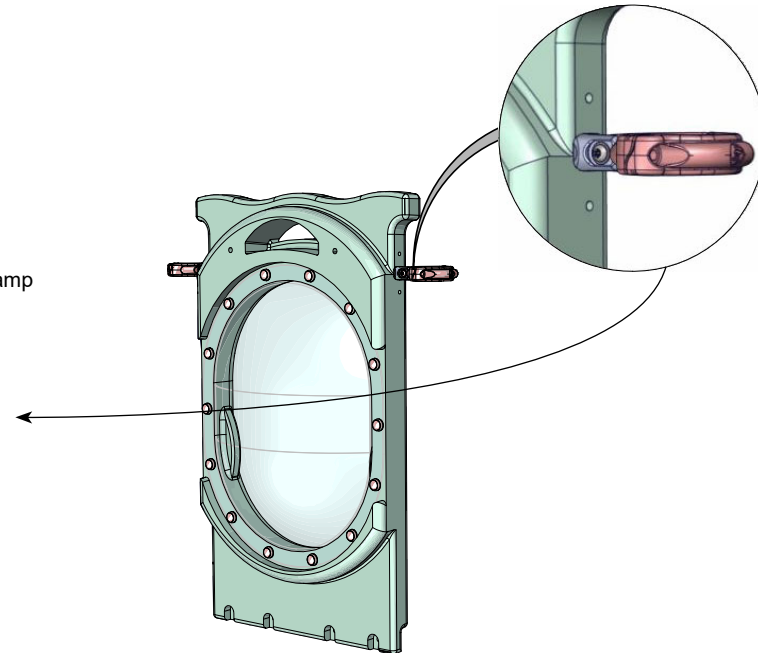
Detail A
Step 3

Attach the panel connectors to the oval panel assembly.

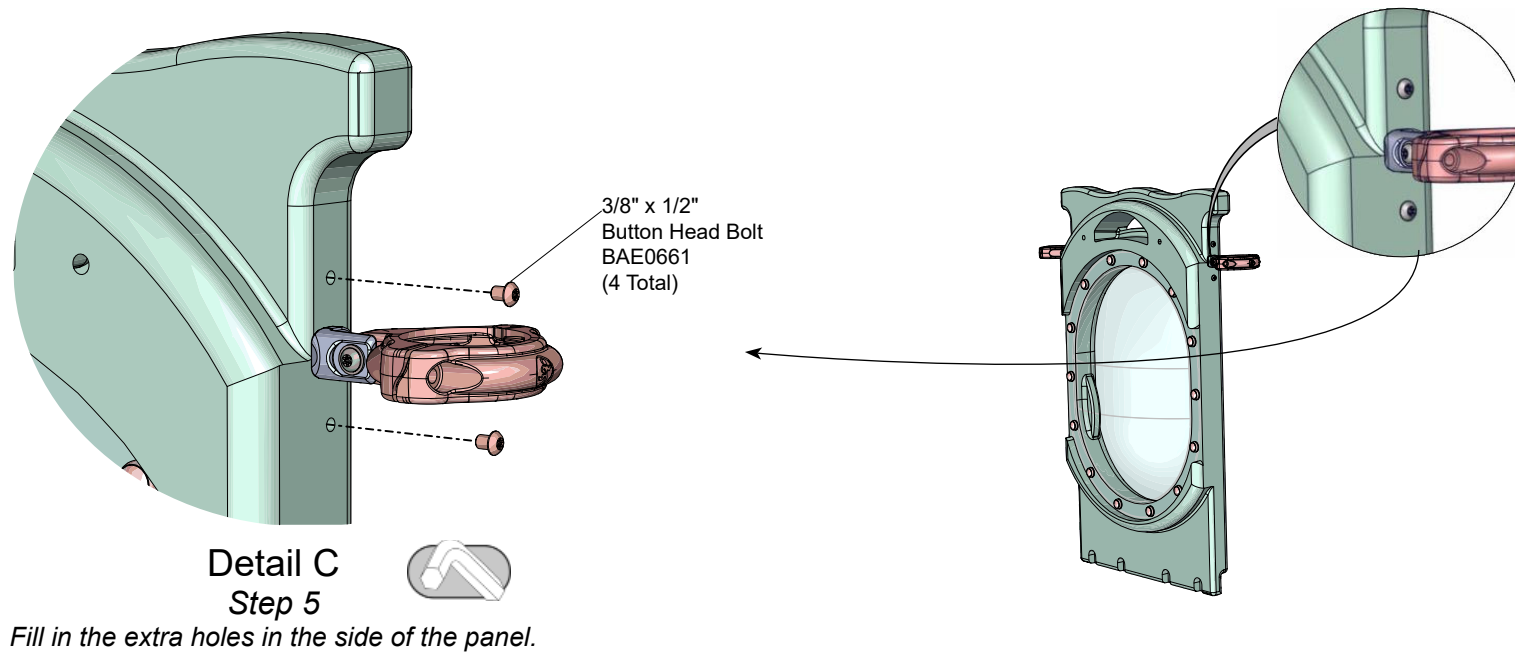


Detail B
Step 4

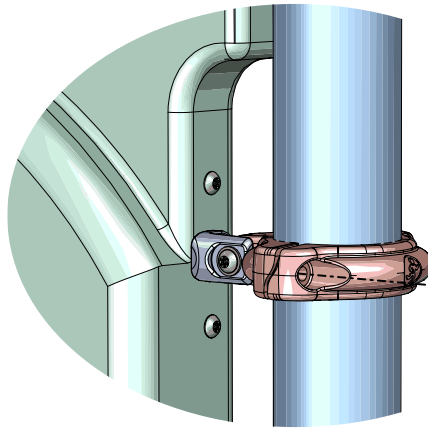
Attach the clamps to the panel connectors.



Installation Instructions



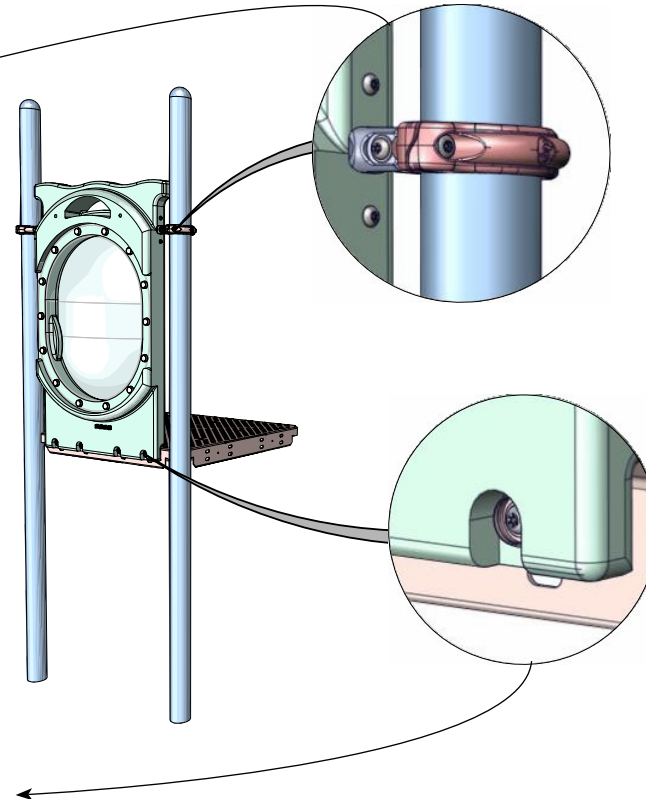
Installation Instructions



3/8" x 1-1/4"
Tamper Resistant Bolt
BAE0662
(2 Total)

Detail D
Step 6

Attach the panel assembly to the support posts.



Plastic Washer
(half of a two-piece assembly)
BPL0300
(4 Total)

3/8" x 1-3/4"
Button Head Bolt
BAE0665
(4 Total)

3/8" Flat Washer
BAE0595
(4 Total)

3/8" Lock Nut
BAE0620
(4 Total)

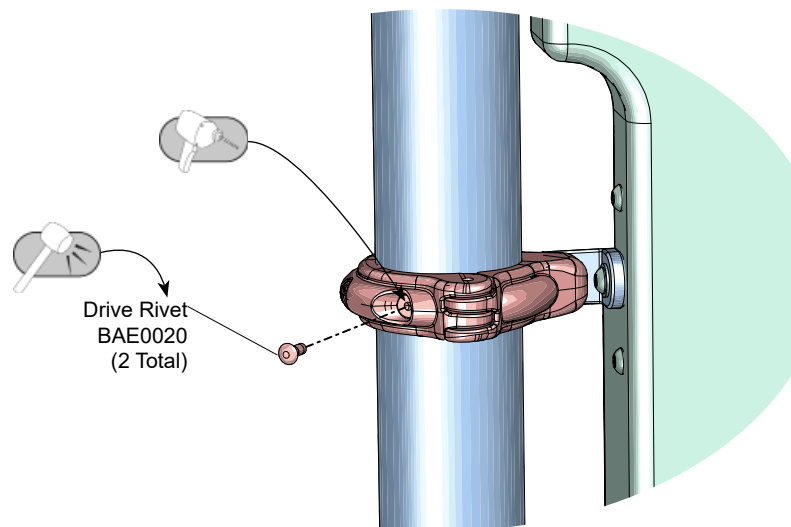
1" O.D. Flat Washer
BAE0600
(4 Total)



Detail E
Step 7

Attach the panel assembly to the deck.

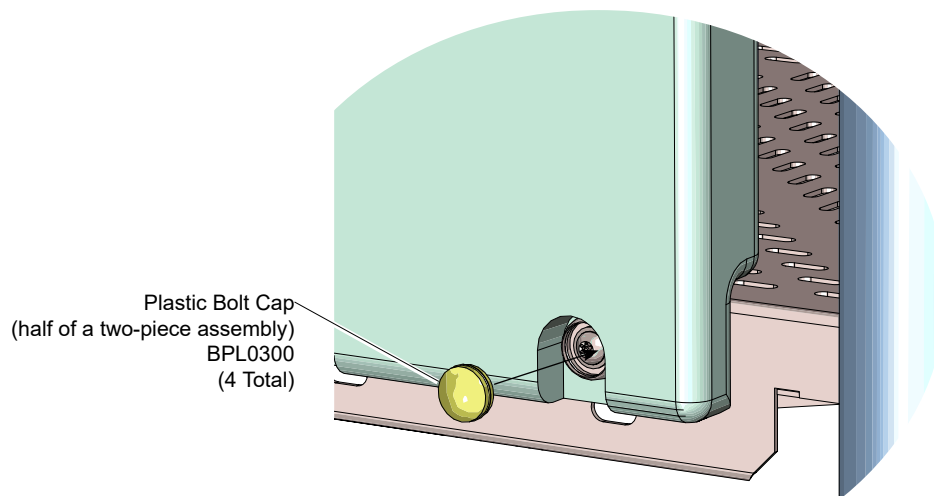
Installation Instructions



Detail F

Step 9

Secure the clamps to the support posts.



Detail G

Step 10

Press the bolt cap into the plastic washer.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete. Do not install bolt caps until the structure is completely assembled and properly footed.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Attach the panel connectors to the oval panel assembly. See **Detail A**. Three holes are provided on each side of the panel assembly for attachment of the panel connector. Select the one that best allows you to locate the clamps on the support posts without interference from another component. Position the connector, with the flat part to the deck side of the panel, and attach to the panel as shown. Fully tighten the connections according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 4: Attach the clamps to the panel connectors. See **Detail B**. Position the flat section of each clamp against the flat section of a connector, and attach as shown.

Step 5: Fill in the extra holes in the side of the panel. See **Detail C**. Attach as shown to the open holes in the panel. Fully tighten the connections according to tightening torque specifications.

Step 6: Attach the panel assembly to the support posts. See **Detail D**. Position the panel assembly between the support posts with the bottom of the panel against the deck. Close the clamps around the support posts, and attach as shown.

Step 7: Attach the panel assembly to the deck. See **Detail E**. Align the holes in the bottom of the panel with the holes in the deck and attach as shown.

Final Details.

Step 8: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 9: Install drive rivets. See **Detail F**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

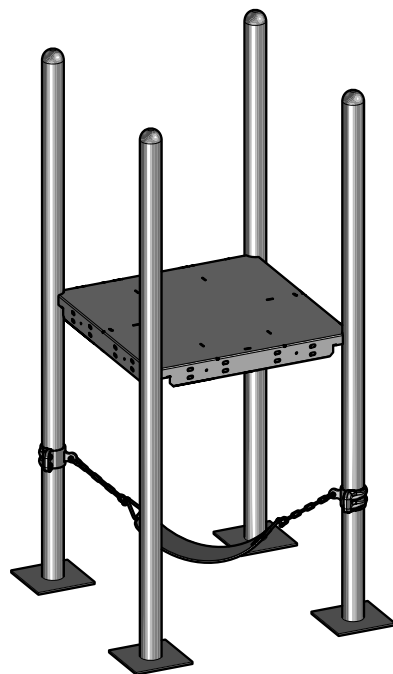
Step 10: Select plastic bolt caps and press them into the plastic washers. See **Detail G**. The bolt caps install more easily when they are warm.

CH4811 - OVAL BUBBLE PANEL DECK MOUNT

PART NO.	DESCRIPTION	QTY.
AAU0625	CLAMP - 3.50" OFFSET CENTERLINE DIE CAST	2
AAU0640	CONNECT - OVAL PANEL	2
ASY0456	ASSEMBLY - BUBBLE PANEL - DECK MOUNT - CH	1
BAE0020	RIVET - 1/4" x 11/16" ALUMINUM DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	4
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0661	BOLT - 3/8"-16 x .50" BUTTON HEAD - SS	4
BAE0662	BOLT - 3/8"-16 x 1.25" TAMP RESISTANT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1.00" BUTTON HEAD - SS	4
BAE0665	BOLT - 3/8"-16 x 1.75" BUTTON HEAD - SS	4
BPL0300	CAP - 3/8" BOLT	4

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Assembly View




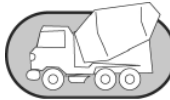



Installation Instructions

Challengers® Model CH4896
Sling Seat

Installation Preparation

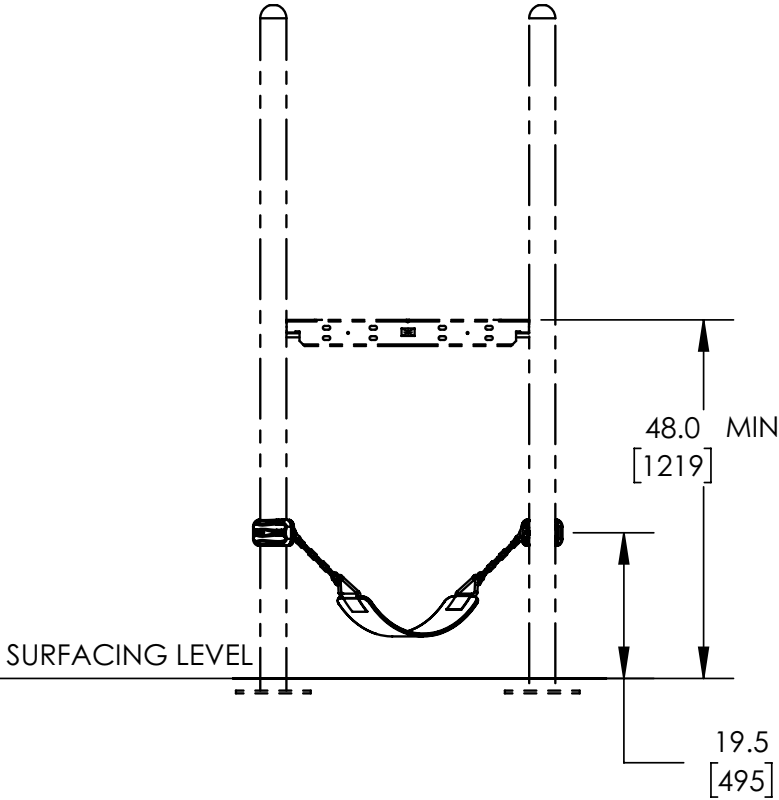
Recommended Crew: One (1) adult
Installation Time: 0.5 hour
Use Zone: Refer to Master Drawing
User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

ICON KEY

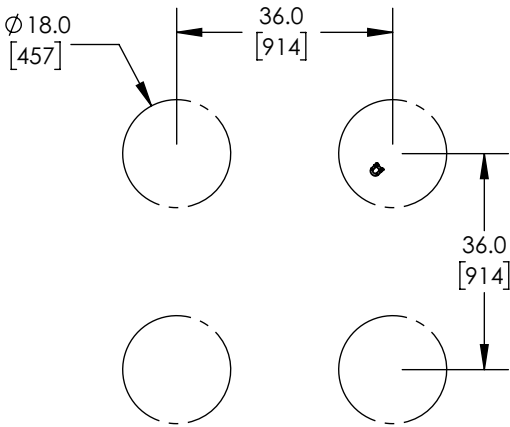
	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

Installation Instructions

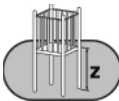
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Elevation Views



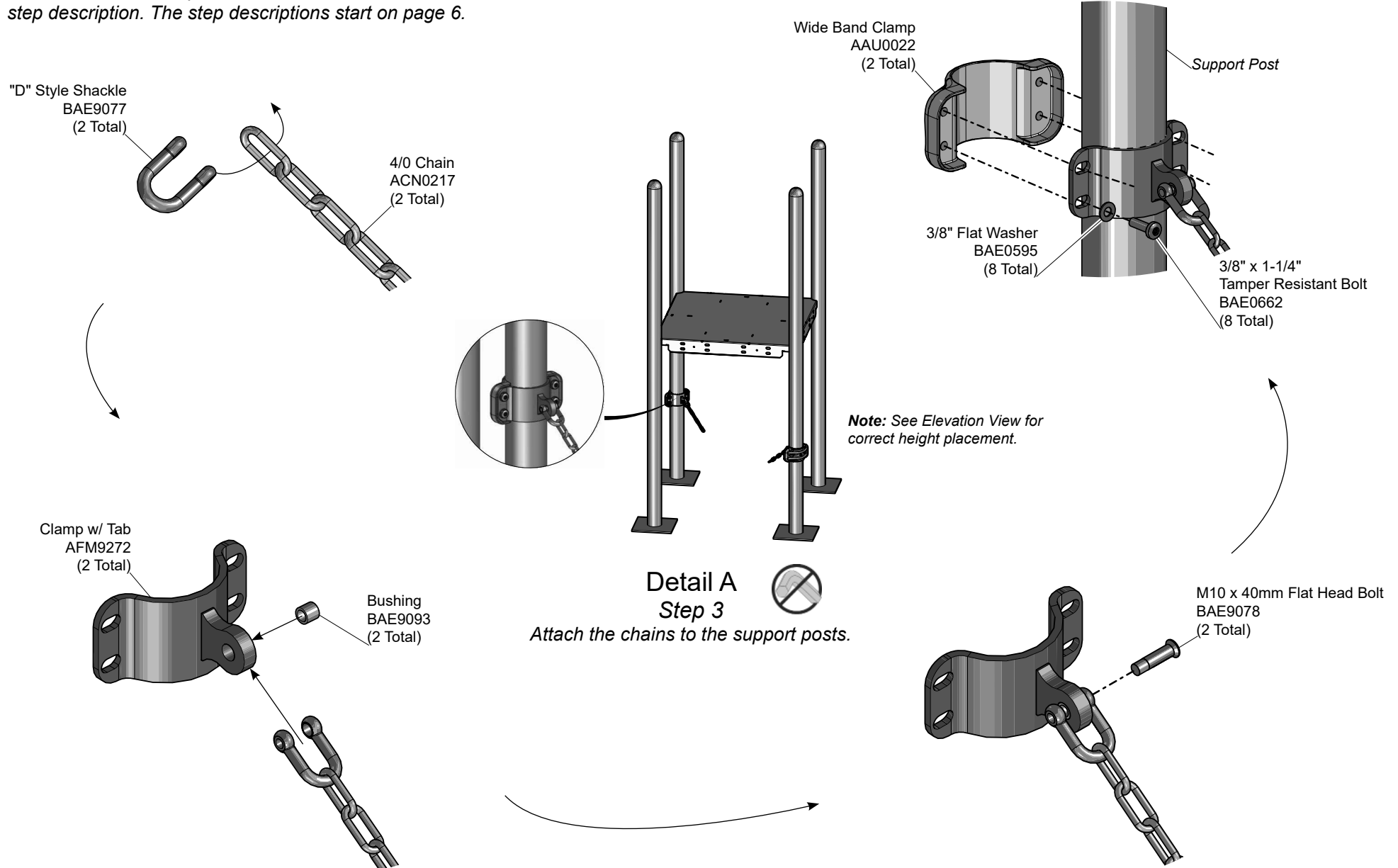
Footing Diagram



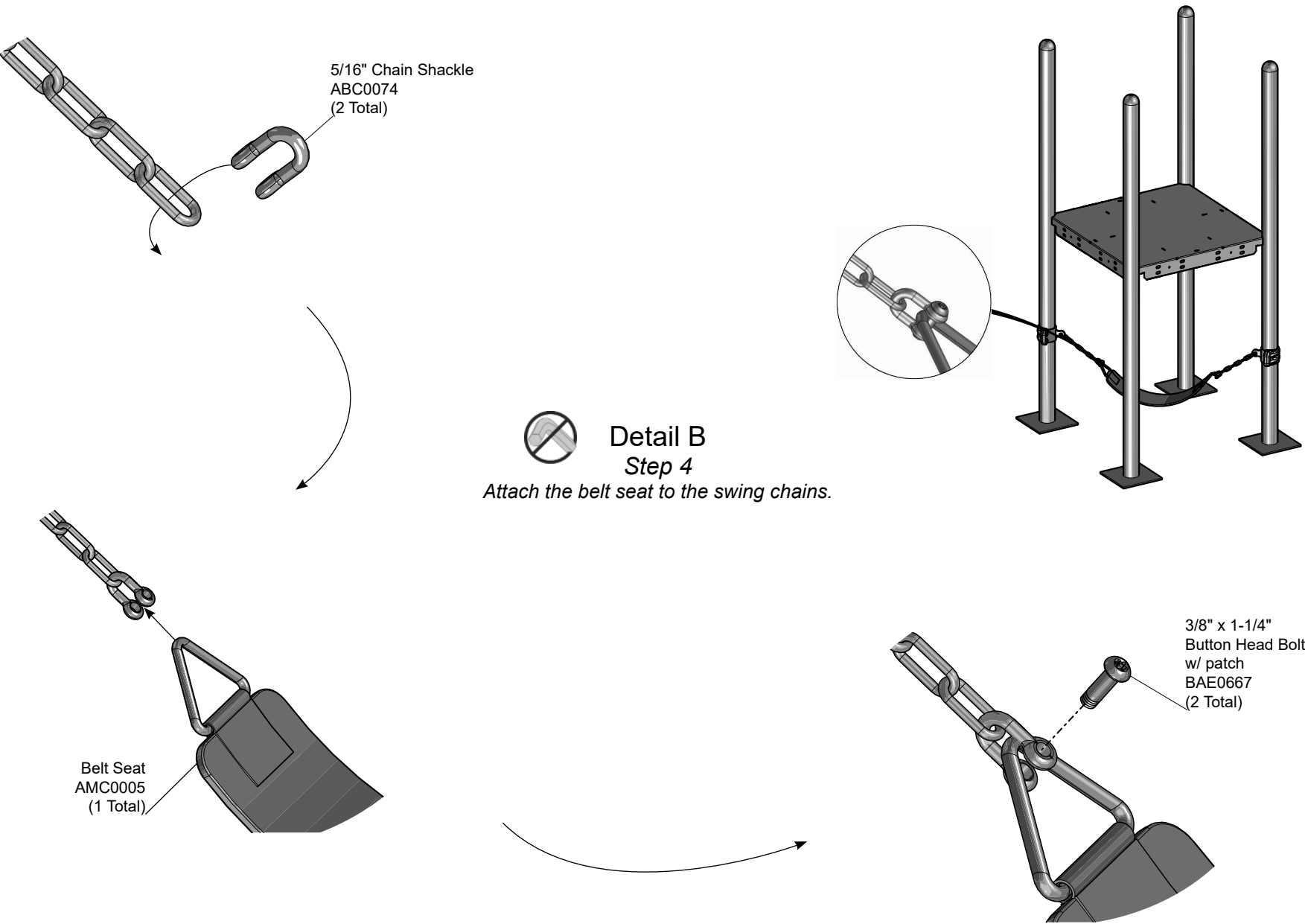
Critical Fall Height:
 ASTM F1487: 10" (254 mm)
 CSA-Z614: 254 mm
 EN1176: 254 mm

Installation Instructions

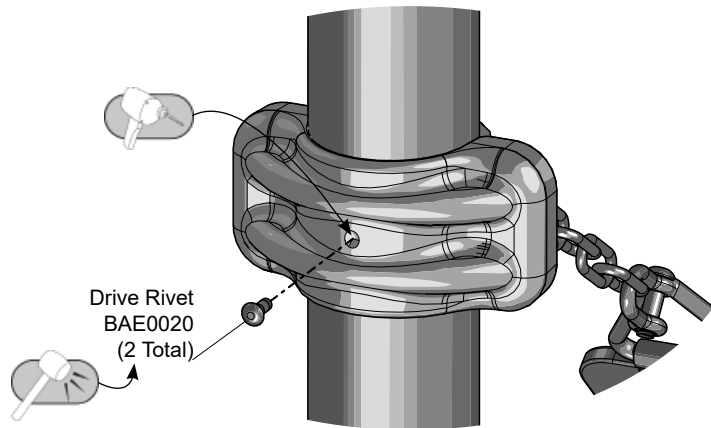
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 6.



Installation Instructions

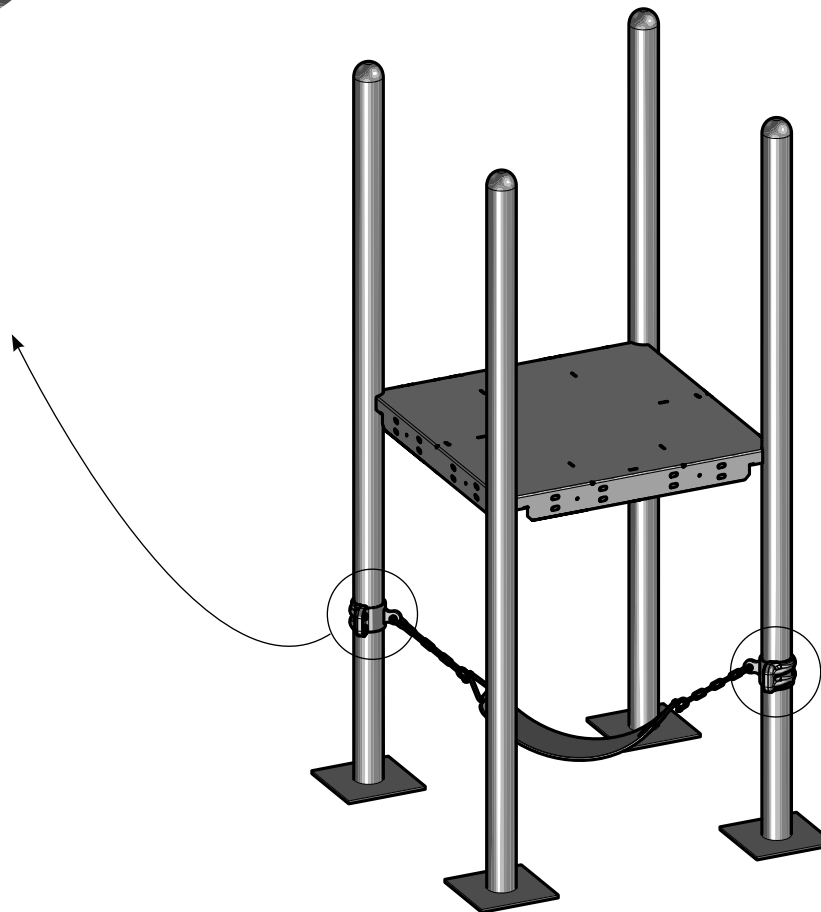


Installation Instructions



Detail C
Step 6

Secure the clamps to the support posts.



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete unless otherwise instructed.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Attach the chains to the support posts. See **Detail A and Elevation View**. Insert the shackle through the last link on one end of the chain, insert the bushing into the tab on the clamp, and attach the chains to the clamps as shown. Position the clamps around the support posts, and attach as shown. Refer to the Elevation View for the correct height placement.

Step 4: Attach the belt seat to the swing chains. See **Detail B**. Insert the shackle through the last link on the other end of the chain, and attach the belt seat as shown.

Final Details.

Step 5: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 6: Install drive rivets. See **Detail C**. After the equipment assembly is complete, install a drive rivet in each pipe clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

CH4896 - SLING SEAT

PART NO.	DESCRIPTION	QTY.
AAU0022	CLAMP - 3.50" WIDE ALUMINUM	2
ABC0074	CONNECTOR - 5/16" CHAIN SHKLE w/ 3/8"-16 THREAD	2
ACN0217	CHAIN - 4/0 - 6 LINKS	2
AFM9272	CLAMP - 3.50" O.D. WITH TAB	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0020	RIVET - 1/4" x 11/16" ALUMINUM DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0662	BOLT - 3/8"-16 x 1.25" TAMP RESIST w/TORX DRIVE	8
BAE0667	BOLT - 3/8" x 1-1/4" BUTTON HEAD w/ NYLON PATCH	2
BAE9077	SHACKLE - "D" STYLE	2
BAE9078	BOLT - M10 x 1.5 x 40mm FLAT HEAD	2
BAE9093	BUSHING - .399" I.D. x .560" O.D. x .500"	2

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Assembly View (representative model)

Installation Instructions

Challengers® Models CH6596 & CH6597

Adventure Bridge

120 in. (3048 mm) & 72 in. (1829 mm)

Installation Preparation


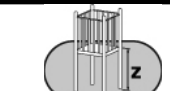




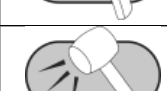
Recommended Crew: Four (4) adults

Installation Time: 3 man-hours

Use Zone: Refer to Master Drawing

User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

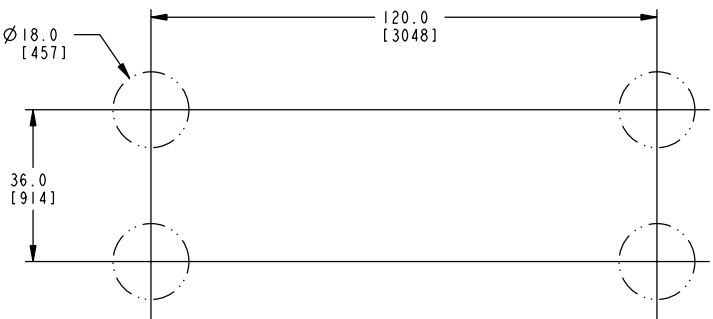
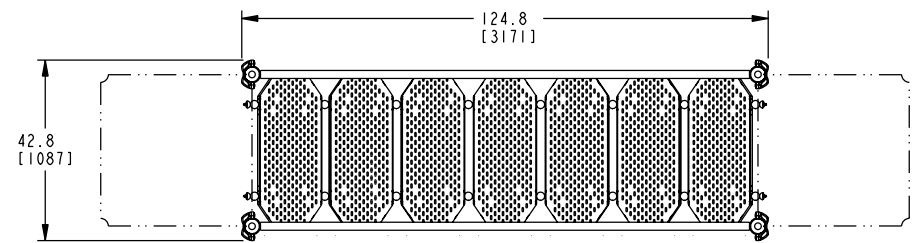
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

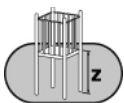
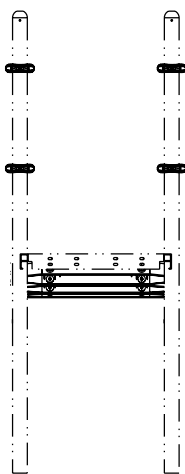
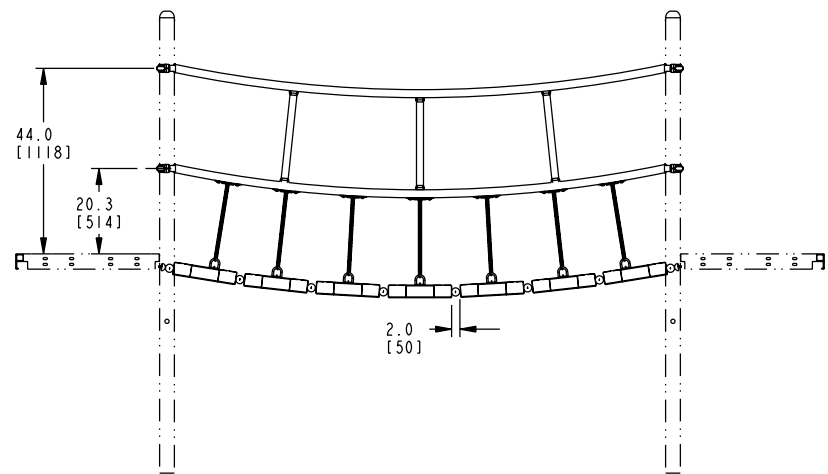
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View



Footing Diagram



Equal to the height of the deck.

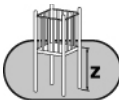
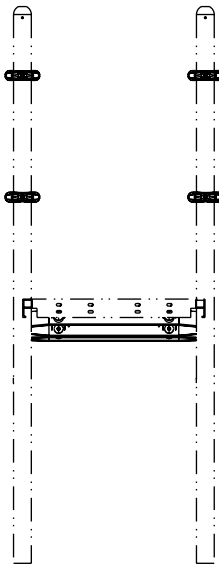
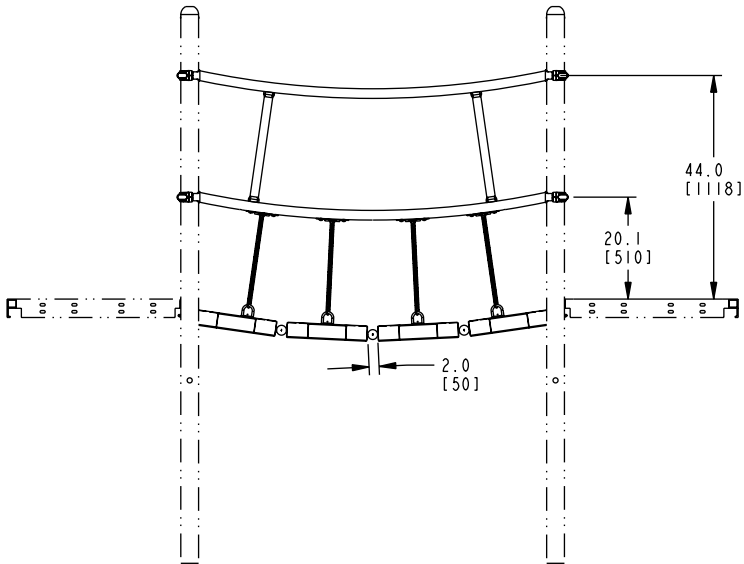
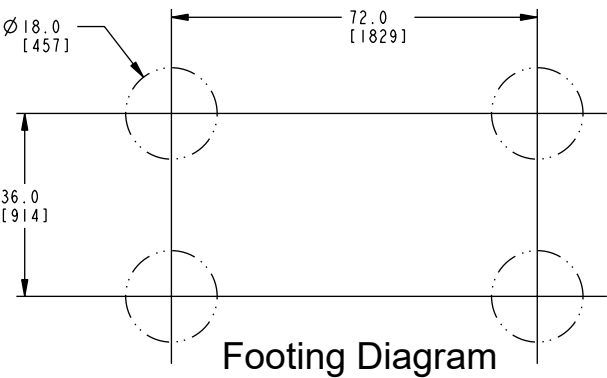
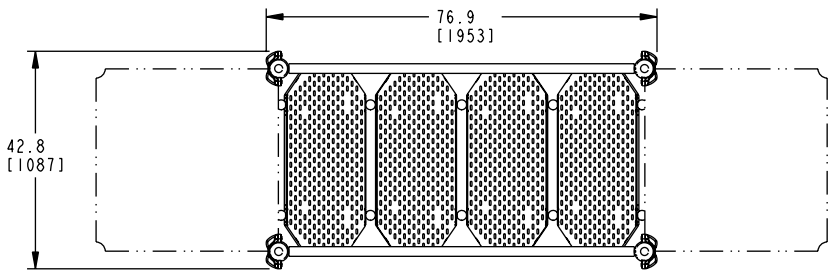
Elevation Views
CH6596



Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View



Equal to the height of the deck.

Elevation Views
CH6597



Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 7.

Narrow Band Clamp
AAU0027

3/8" Flat Washer
BAE0595

Bridge Guardrail
(See Table)

3/8" x 1-1/4"
Tamper Resistant Bolt
BAE0662



Detail A
Step 3

Model	Guardrail Part No.	Plank Part No.	No. of Planks
ZZCH6596	AEN0441	BPM0282	7
ZZCH6597	AEN0291	BPM0285	4

**This side of the plank
faces the deck.**

ISO 43 Chain
ACN0069

Bridge Plank
(See Table)

1" O.D. Flat Washer
BAE0600

3/8" Lock Nut
BAE0620

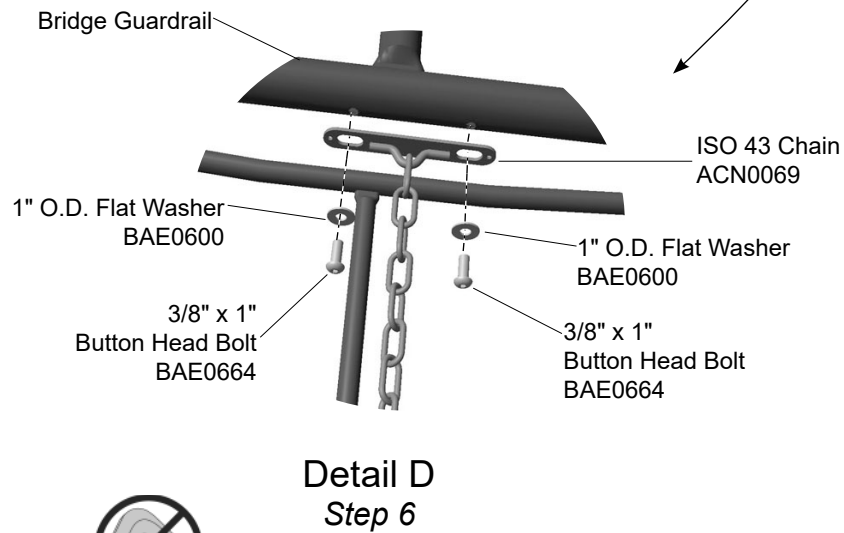
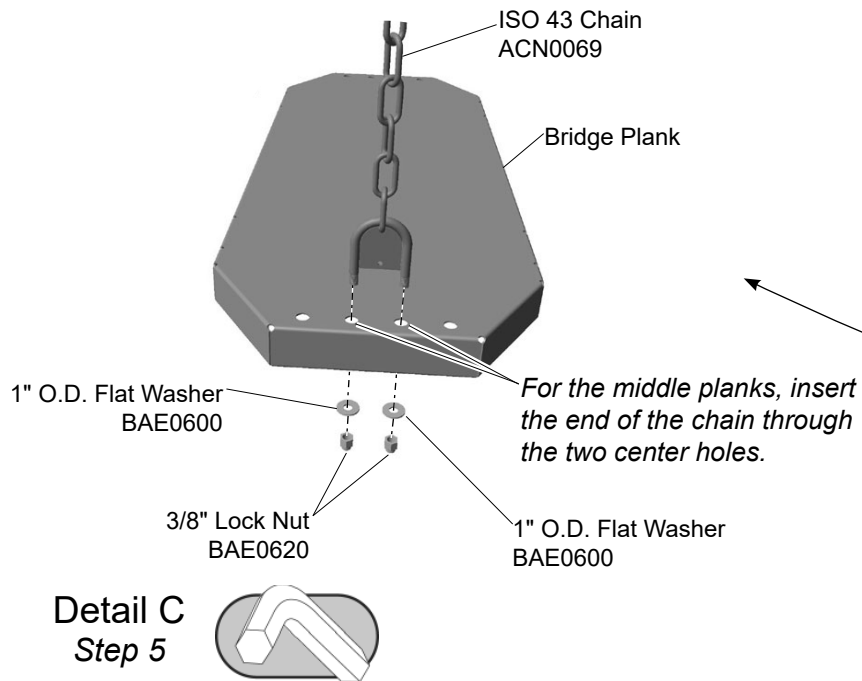
*For the planks attached to decks,
insert the end of the chain through
the two inside holes.*

1" O.D. Flat Washer
BAE0600

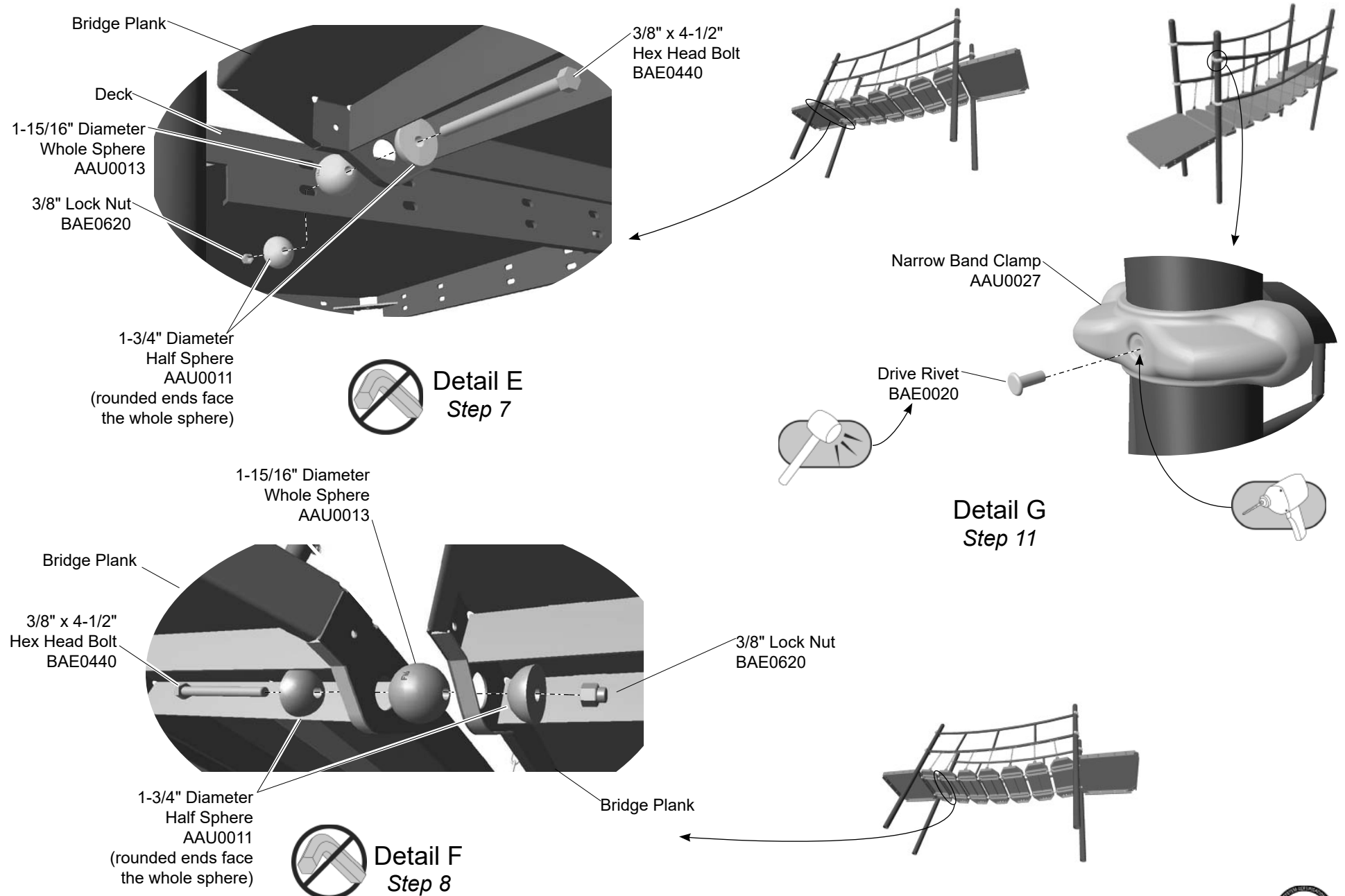
Detail B
Step 4



Installation Instructions



Installation Instructions



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Attach the guardrails to the support posts.

Step 3: Attach guardrails to support posts. See **Detail A**. Select both guardrails, (8) eight narrow band clamps, and the appropriate hardware. There are (16) sixteen connections. Place each guardrail between the support posts with curve in the rails pointing downward and at the height specified in the corresponding model **Elevation View**. Attach each band clamp to a guardrail band as shown.

Note: This step will require 2 to 3 people. One or two people need to support the guardrails while the remaining person makes hardware connections.

Assemble the bridge planks.

Note: The next (2) two steps should be accomplished on the ground for ease of assembly. For each model, the (2) two planks that will be attached to the decks will have a chain attached through the *inside* holes toward the middle planks while the remaining planks will have the chains attached to the *center* holes.

Step 4: Attach the suspension chains to the inside holes on (2) two bridge planks. See **Detail B**. Select (2) two bridge planks, (4) four chains with looped and flat ends, and the appropriate hardware. There are (4) four connections per plank. Insert the u-bolt (loop) on the end of a chain through the two *inside* holes at each end of the plank and attach as shown. Repeat this procedure for the remaining plank. These two planks will be utilized as the **end** planks on the bridge.

Attach the chains to the remaining bridge planks.

Step 5: Attach the chains to the remaining bridge planks. See **Detail C**. Select the remaining bridge planks, (2) two suspension chains for *each* plank, and the appropriate hardware. There are (4) four connections per plank. Insert the u-bolt (loop) on the end of a chain through the *center* two holes on each end of a plank and attach as shown. Repeat this procedure for the remaining plank(s).

Attach the bridge planks to the bridge guardrails.

- Orient the planks under the guardrails.
- Position each **end** plank near an adjoining platform with the chain mounting loops **towards the center planks**.
- This step will require 2 to 3 people. One or two people need to support the bridge planks while the remaining person makes hardware connections.

Step 6: Attach the chains to the guardrails. See **Detail D**. Select the plank assemblies and the appropriate hardware. There are (4) four connections per plank. Select a plank and align the holes of the flat ends of the suspension chains with the holes on the underside of the bottom guardrails. Attach as shown. Repeat this process for each remaining plank.

Attach an end plank to a deck.

Step 7: Attach an end plank to a deck. See **Detail E**. Select (2) two of the following: 1-3/4" diameter whole spheres, 3/8" x 4-1/4" hex head bolts and 3/8" lock nuts. Also select (4) of the following: 1-3/4" diameter half spheres. Center the bridge plank against a deck and attach as shown.

Attach the middle plank to the end plank.

Step 8: Attach the middle plank to the end plank. See **Detail F**. Select (2) two of the following: 1-3/4" diameter whole spheres, 3/8" x 4-1/4" hex head bolts and 3/8" lock nuts. Select (4) of the following: 1-3/4" diameter half spheres. Attach the middle plank to the end plank as shown.

Step 9: Repeat **Steps 7 and 8** to complete bridge assembly. Attach remaining planks together and to the deck as described in previous steps.

Installation Instructions

Final Details.

__**Step 10:** Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

__**Step 11:** Install drive rivets. See **Detail G**. After the structure assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, pound the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

CH6596 - 120 in. (3048 mm) ADVENTURE BRIDGE

PART NO.	DESCRIPTION	QTY.
AAU0011	SPACER - 1-3/4" DIA. HALF SPHERE w/HOLE THRU MID.	32
AAU0013	SPACER - 1-15/16" DIA. SPHERE w/HOLE THRU MID.	16
AAU0027	CLAMP - 3-1/2" NARROW ALUMINUM BAND	8
ACN0069	CHAIN - 20.50" ISO43 w/BRACKETS	14
AEN0441	GUARDRAIL - 6.31" x 31.82" x 119.75" w/3-1/2" CLAMPS	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	8
BAE0440	BOLT - 3/8"-16 x 4-1/2" HEX HEAD	16
BAE0595	WASHER - 3/8" SAE FLAT	16
BAE0600	WASHER - 1" O.D. FLAT	56
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	44
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRV	16
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	28
BPM0282	PLANK - 37.75" x 15.00" x 3.00"	7

CH6597 - 72 in. (1829 mm) ADVENTURE BRIDGE

PART NO.	DESCRIPTION	QTY.
AAU0011	SPACER - 1-3/4" DIA. HALF SPHERE w/HOLE THRU MID.	20
AAU0013	SPACER - 1-15/16" DIA. SPHERE w/HOLE THRU MID.	10
AAU0027	CLAMP - 3-1/2" NARROW ALUMINUM BAND	8
ACN0069	CHAIN - 20.50" ISO43 w/BRACKETS	8
AEN0291	GUARDRAIL - 71.75" x 29.38" x 6.31"	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	8
BAE0440	BOLT - 3/8"-16 x 4-1/2" HEX HEAD	10
BAE0595	WASHER - 3/8" SAE FLAT	16
BAE0600	WASHER - 1" O.D. FLAT	32
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	26
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRV	16
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	16
BPM0285	PLANK - 37.75" x 15.82" x 3.00"	4

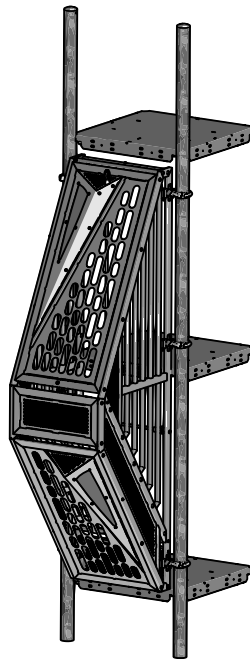


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Installation Instructions

Challengers® Model CH6730
KaleidoClimber




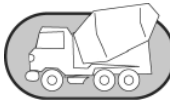


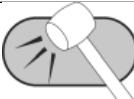


Assembly View

Installation Preparation

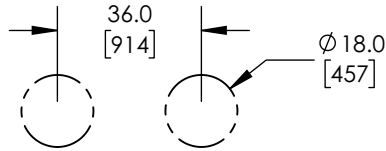
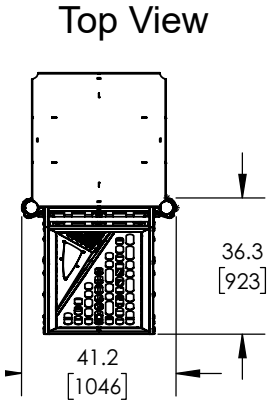
Recommended Crew: Two (2) adults
Installation Time: 2 man-hours
Use Zone: Refer to Master Layout Drawing
User Group Age (years): ASTM/CSA: 5-12, EN: 6-14

ICON KEY

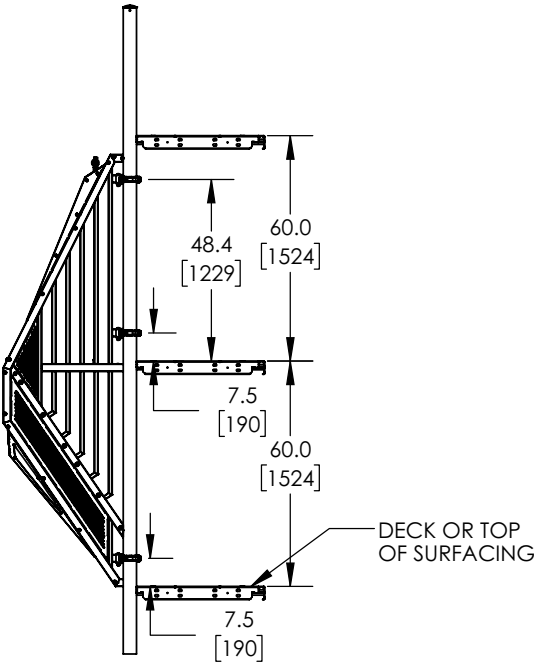
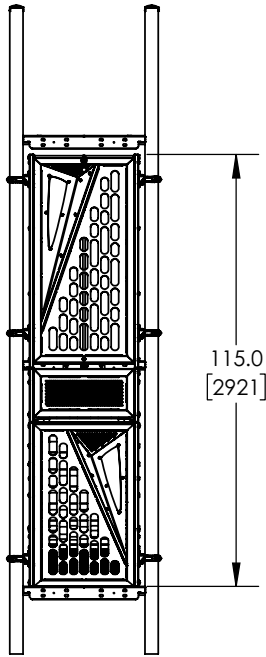
	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



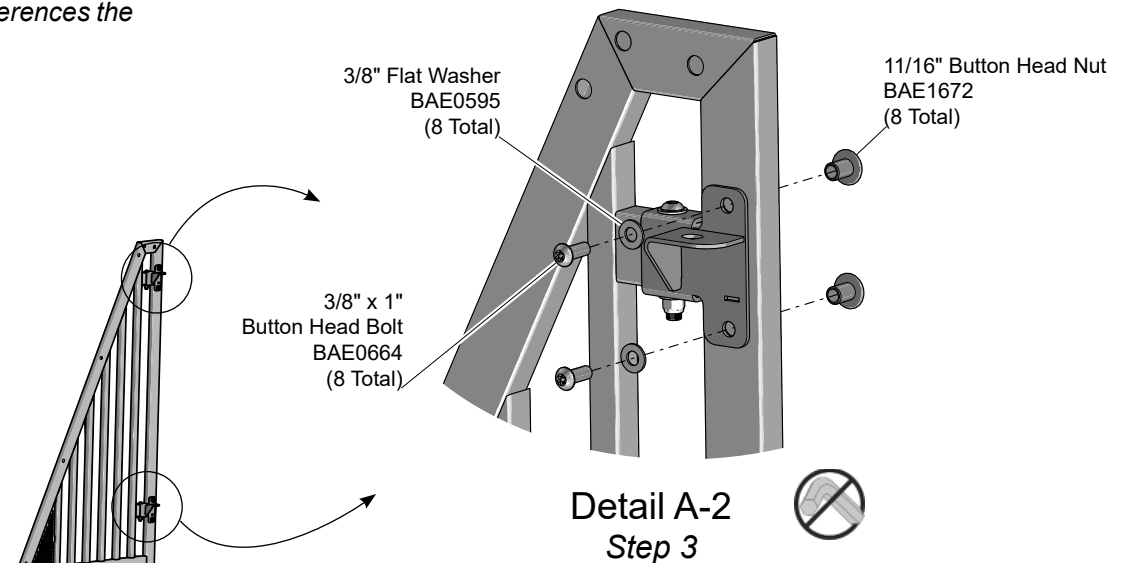
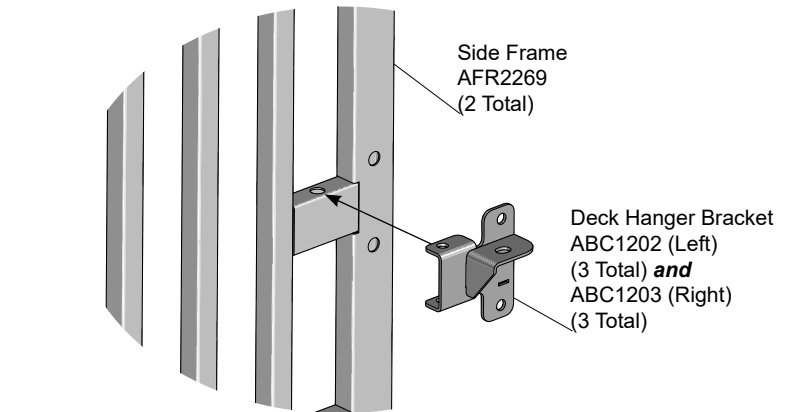
Footing Diagram



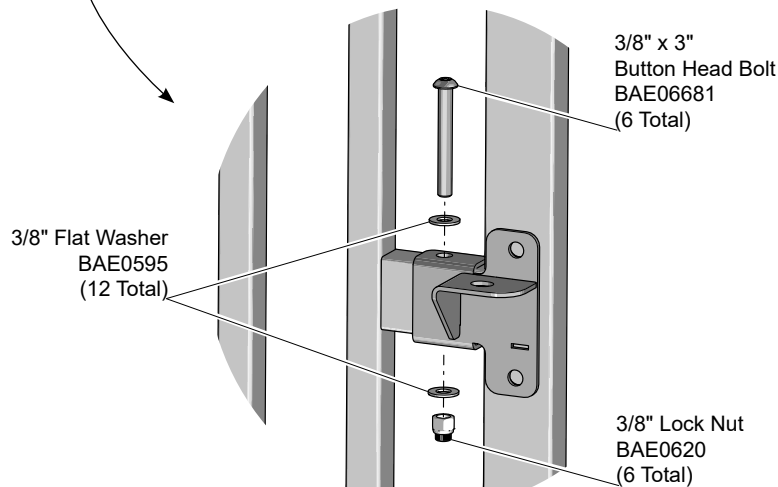
Elevation Views

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 16.

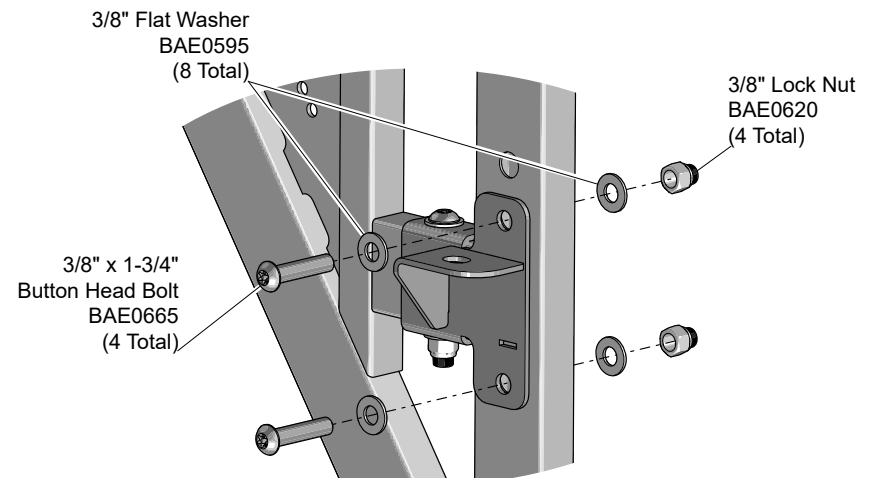


(Top and Middle Brackets)
Attach the brackets to the outside of the side frames.



Detail A-1
Step 3

Attach the brackets to the outside of the side frames.

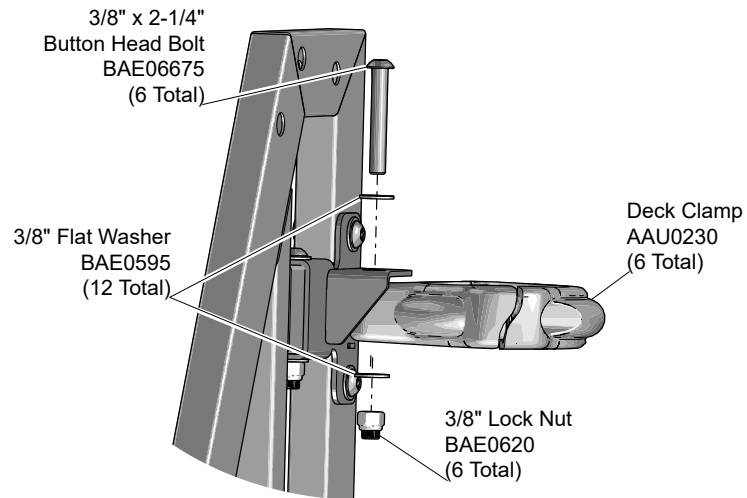


Detail A-3
Step 3

(Bottom Brackets)

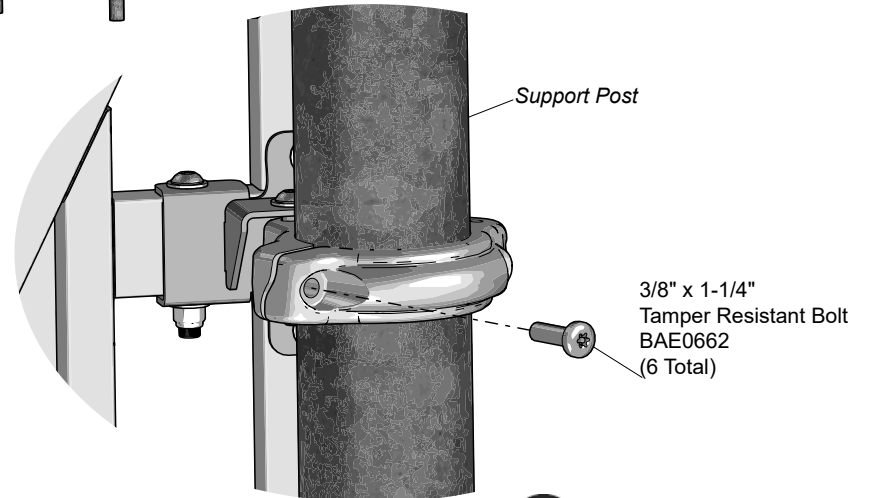
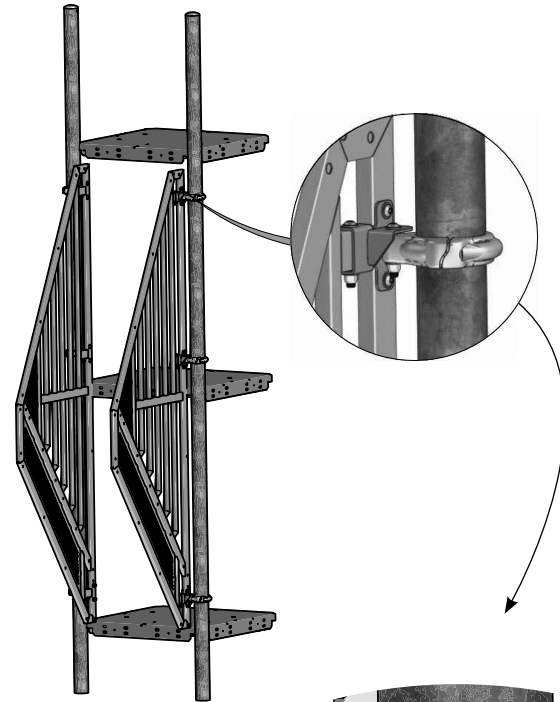
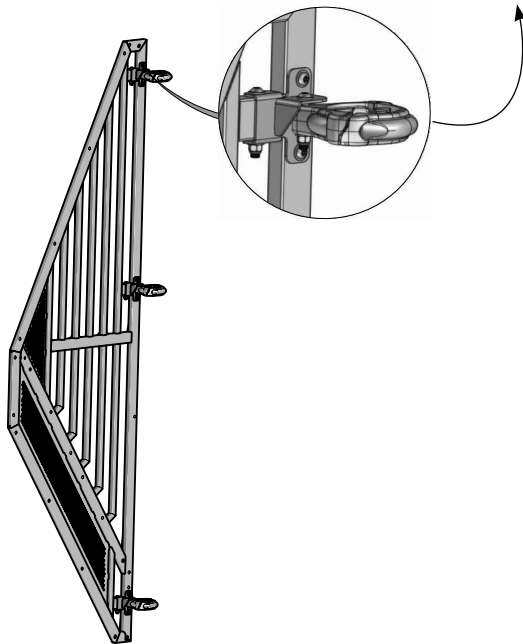
Attach the brackets to the outside of the side frames.

Installation Instructions



Detail B Step 4

Attach the clamps to the deck hanger brackets.

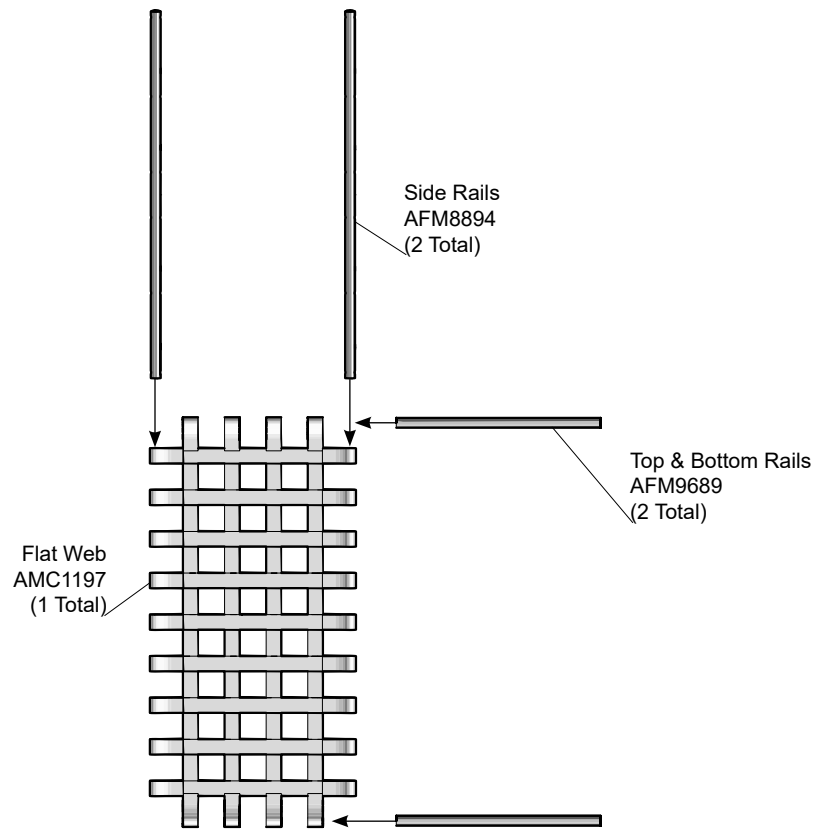


Detail C Step 5

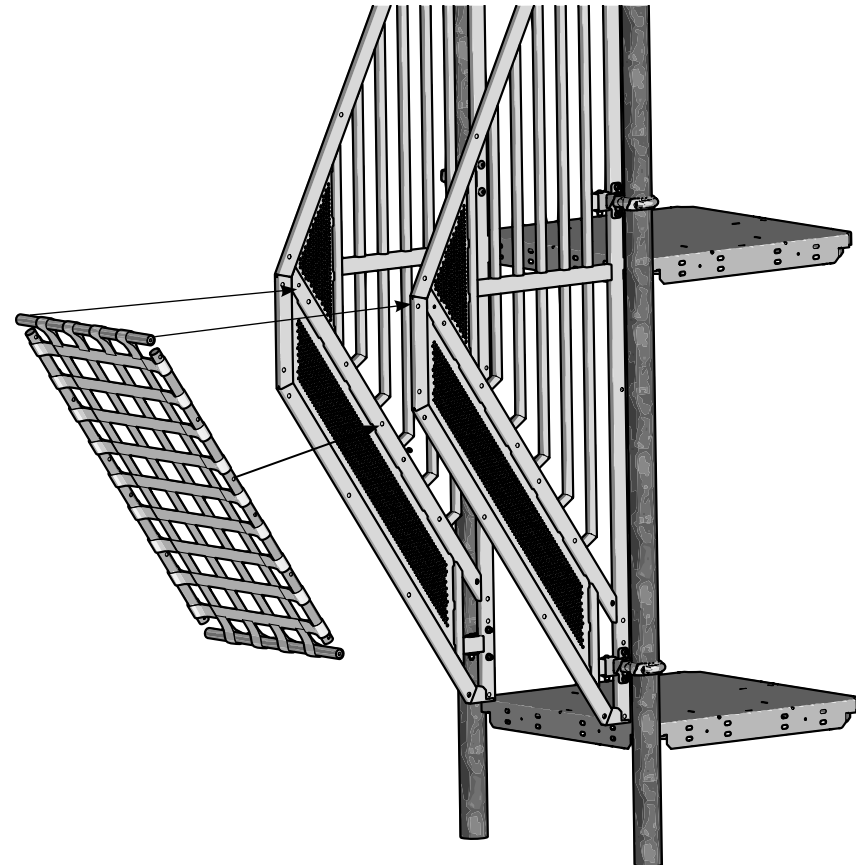


Attach the clamps to the support posts.

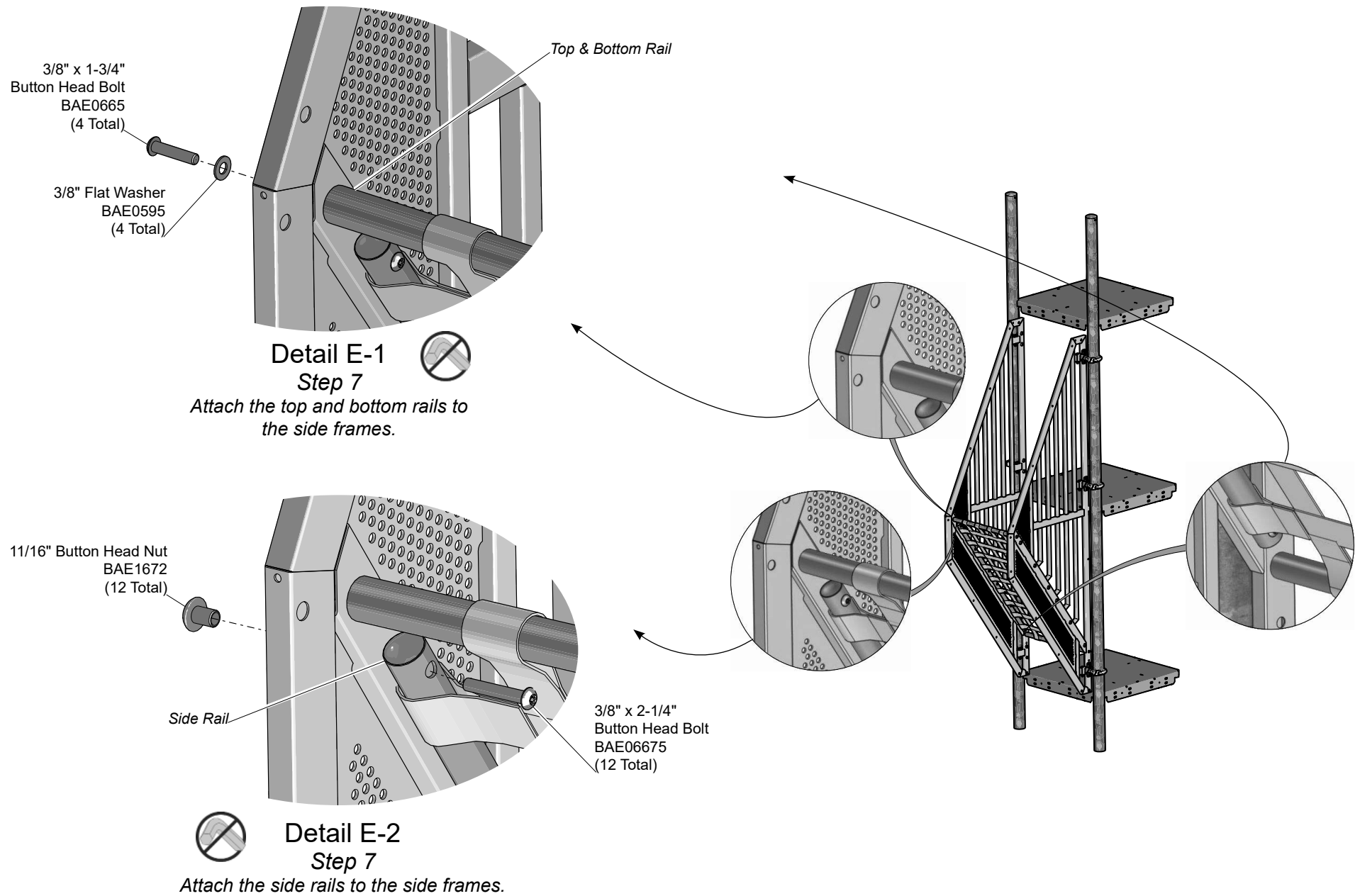
Installation Instructions



Detail D
Step 6
Assemble the flat web.



Installation Instructions



Installation Instructions

11/16" Button Head Nut
BAE1672
(4 Total)

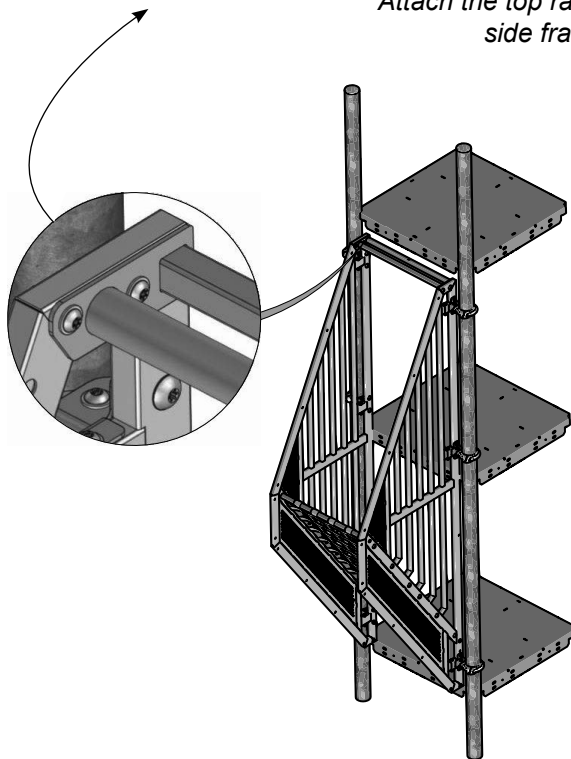
3/8" Flat Washer
BAE0595
(4 Total)

3/8" x 1"
Button Head Bolt
BAE0664
(4 Total)

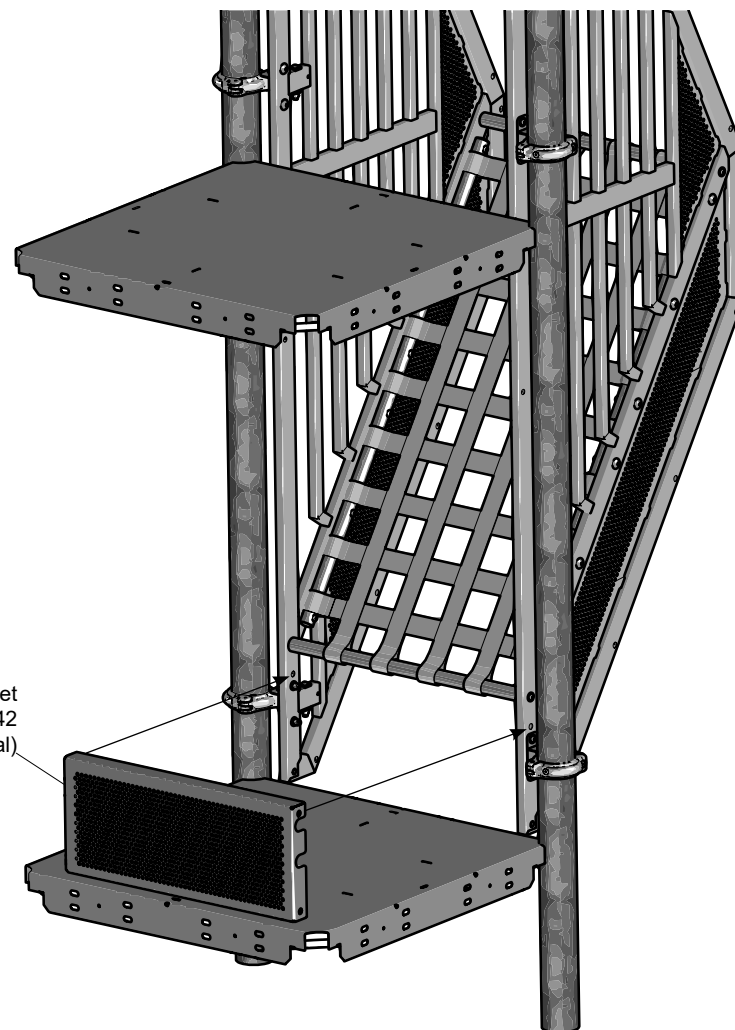
Top Rail Frame
AFR2544
(1 Total)

Detail F
Step 8

*Attach the top rail frame to the
side frames.*



Bottom Bracket
APL3442
(1 Total)



Installation Instructions

3/8" x 1-3/4"
Button Head Bolt
BAE0665
(4 Total)

3/8" Flat Washer
BAE0595
(8 Total)

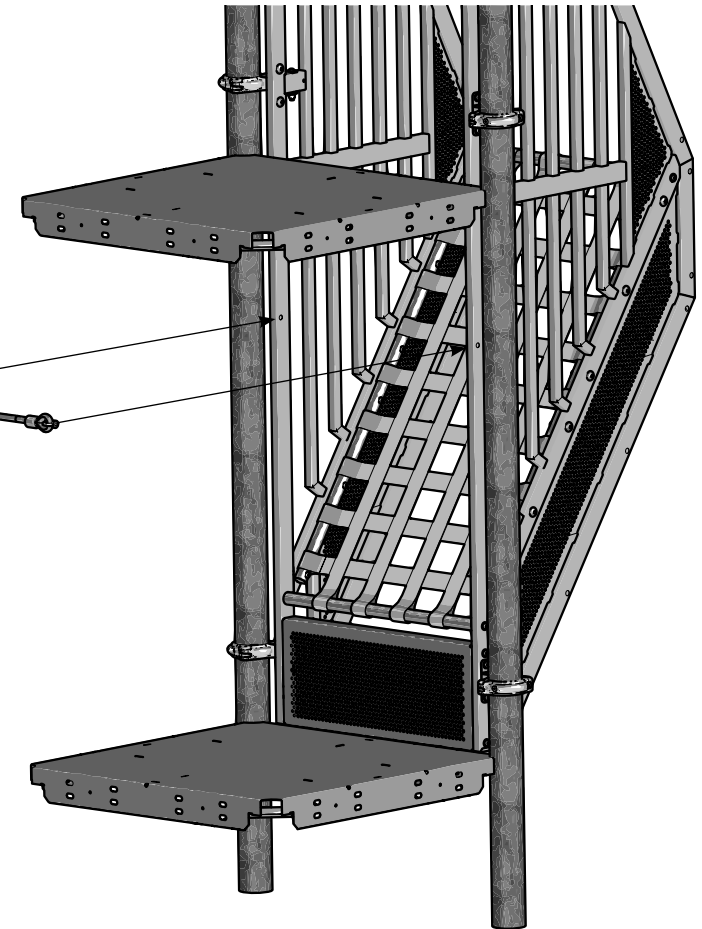
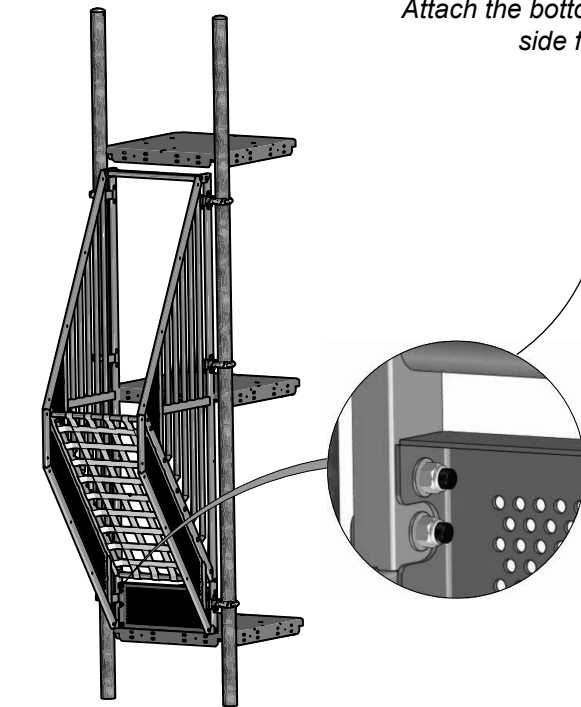
3/8" Lock Nut
BAE0620
(4 Total)

Note: The side frame is shown transparent for ease of viewing the connection.

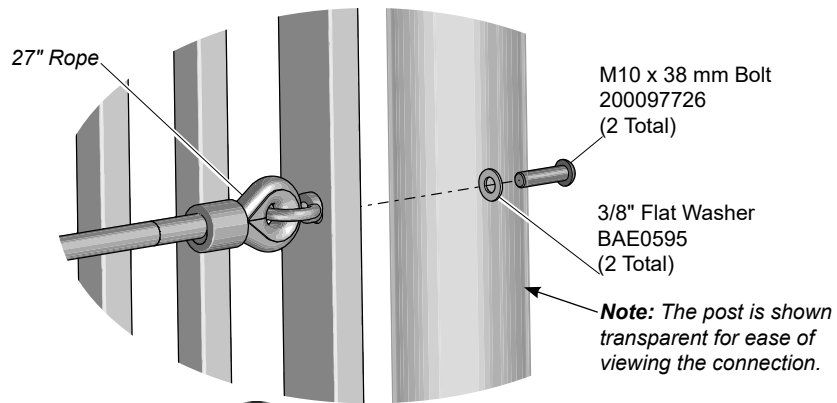
Detail G Step 9

Attach the bottom bracket to the side frames.

27" Rope
AMC1198
(1 Total)

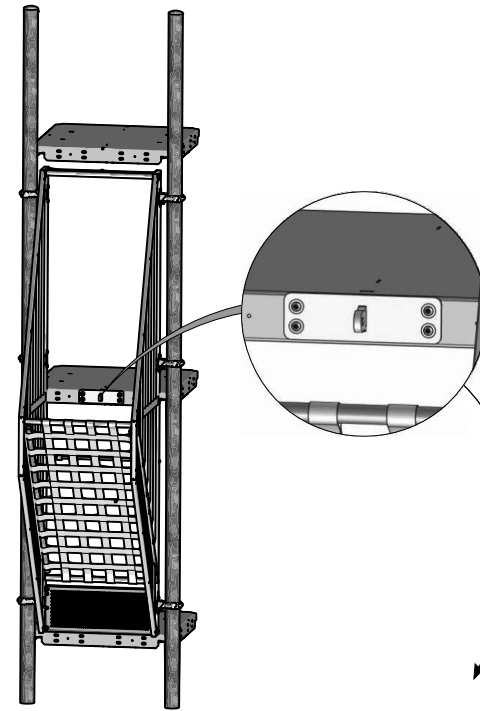
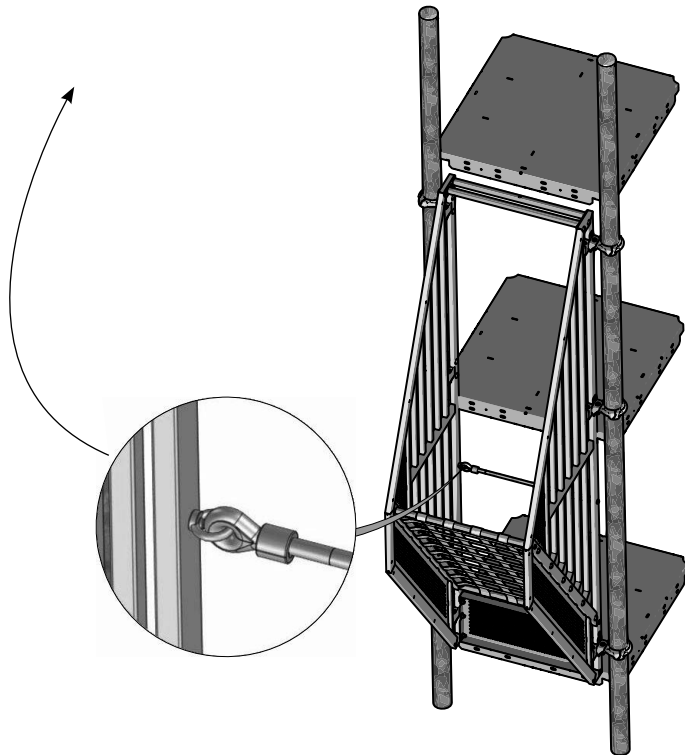


Installation Instructions



Detail H Step 10

Attach the 27 in. rope to the side frames.



Rope Deck Bracket
AFR2557
(1 Total)

3/8" x 1-1/4"
Button Head Bolt
BAE0666
(4 Total)

1" O.D. Flat Washer
BAE0600
(8 Total)

3/8" Lock Nut
BAE0620
(4 Total)

Detail J Step 11

Attach the rope deck bracket to the middle deck.



Installation Instructions

3/8" Flat Washer
BAE0595
(1 Total)

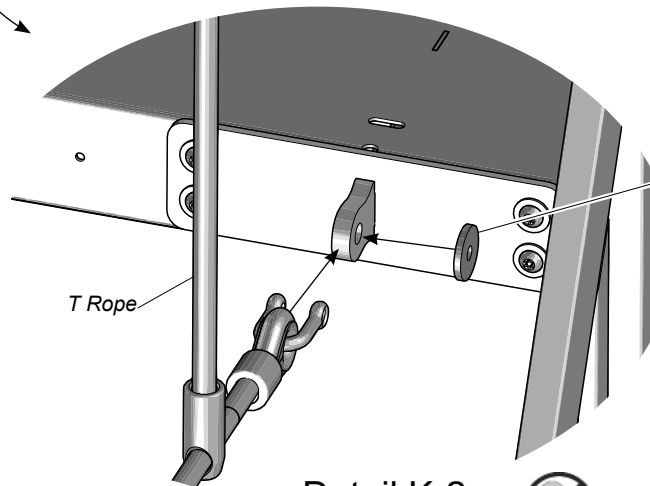
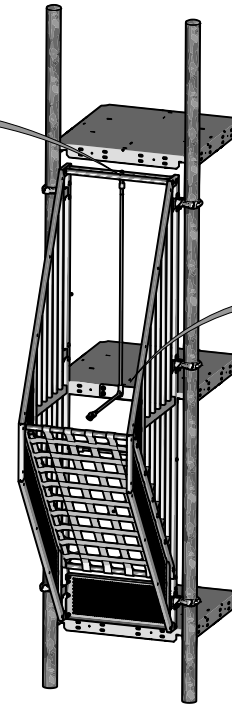
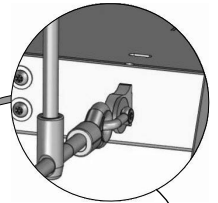
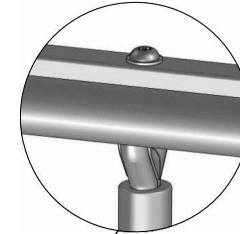
M10 x 38 mm Bolt
200097726
(1 Total)

T Rope
AMC1201
(1 Total)

Detail K-1

Step 12

Attach the T Rope to the top rail frame.



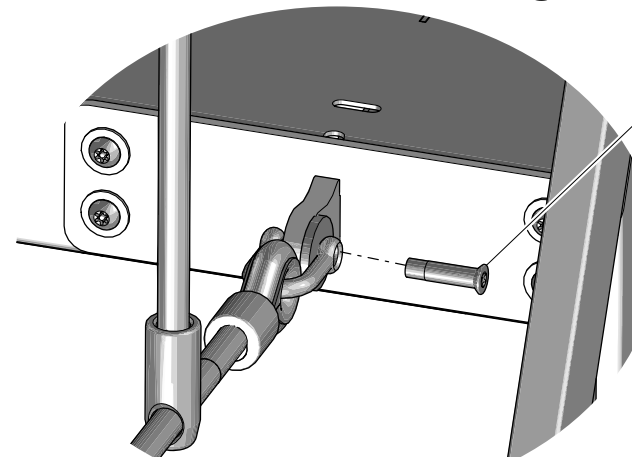
Rope Spacer
(supplied w/ rope)

T Rope

Detail K-2

Step 12

Attach the T Rope to the rope deck bracket.



M10 x 40 mm Bolt
(supplied w/ rope)

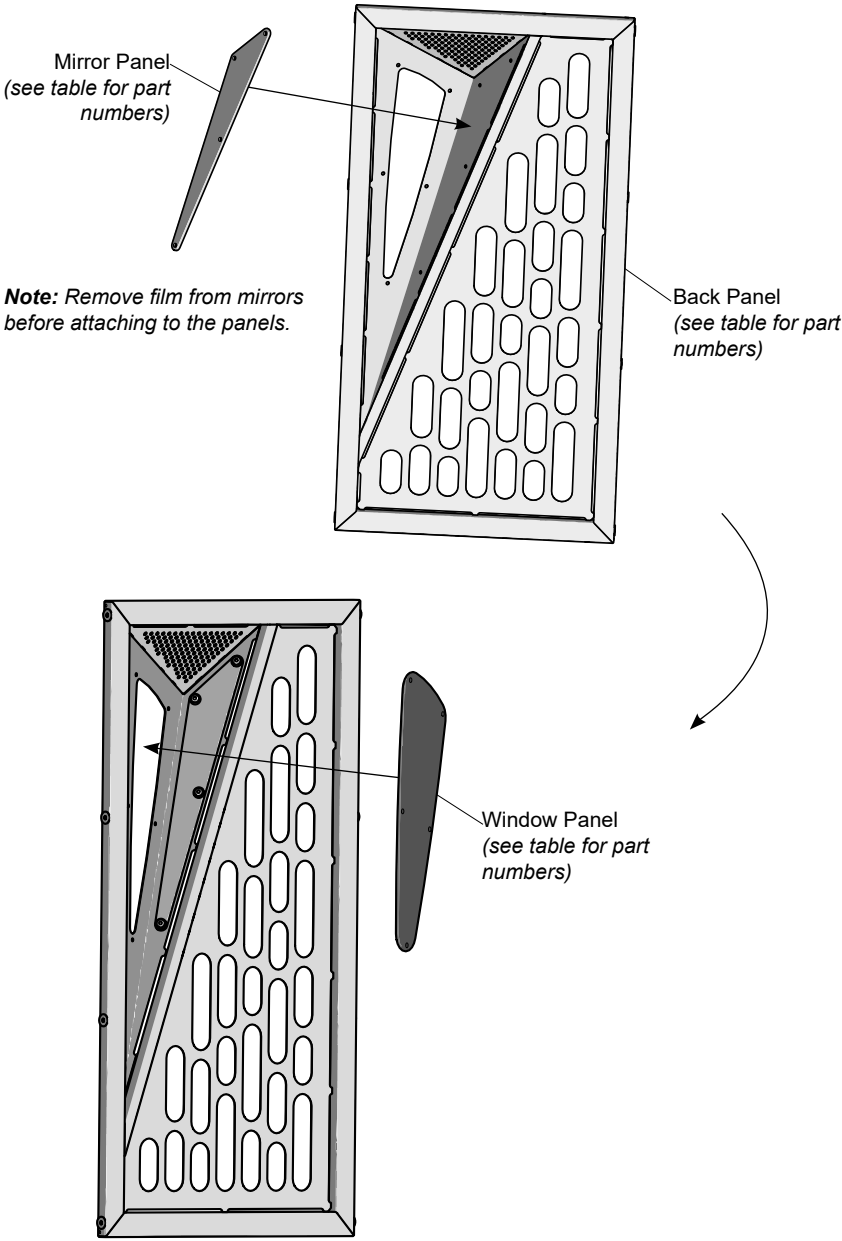
Detail K-2

Step 12

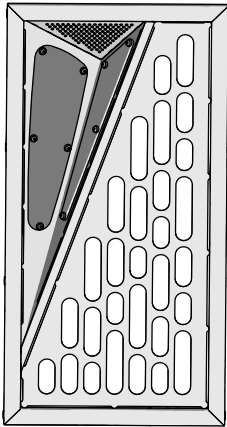
Attach the T Rope to the rope deck bracket.



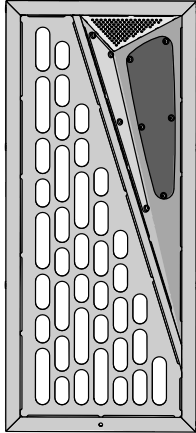
Installation Instructions



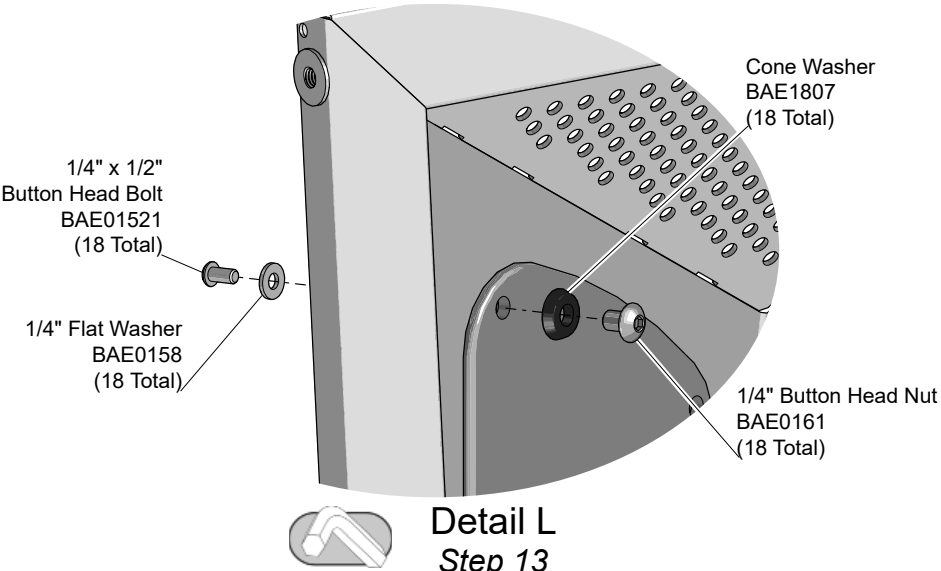
Bottom Back Panel



Top Back Panel



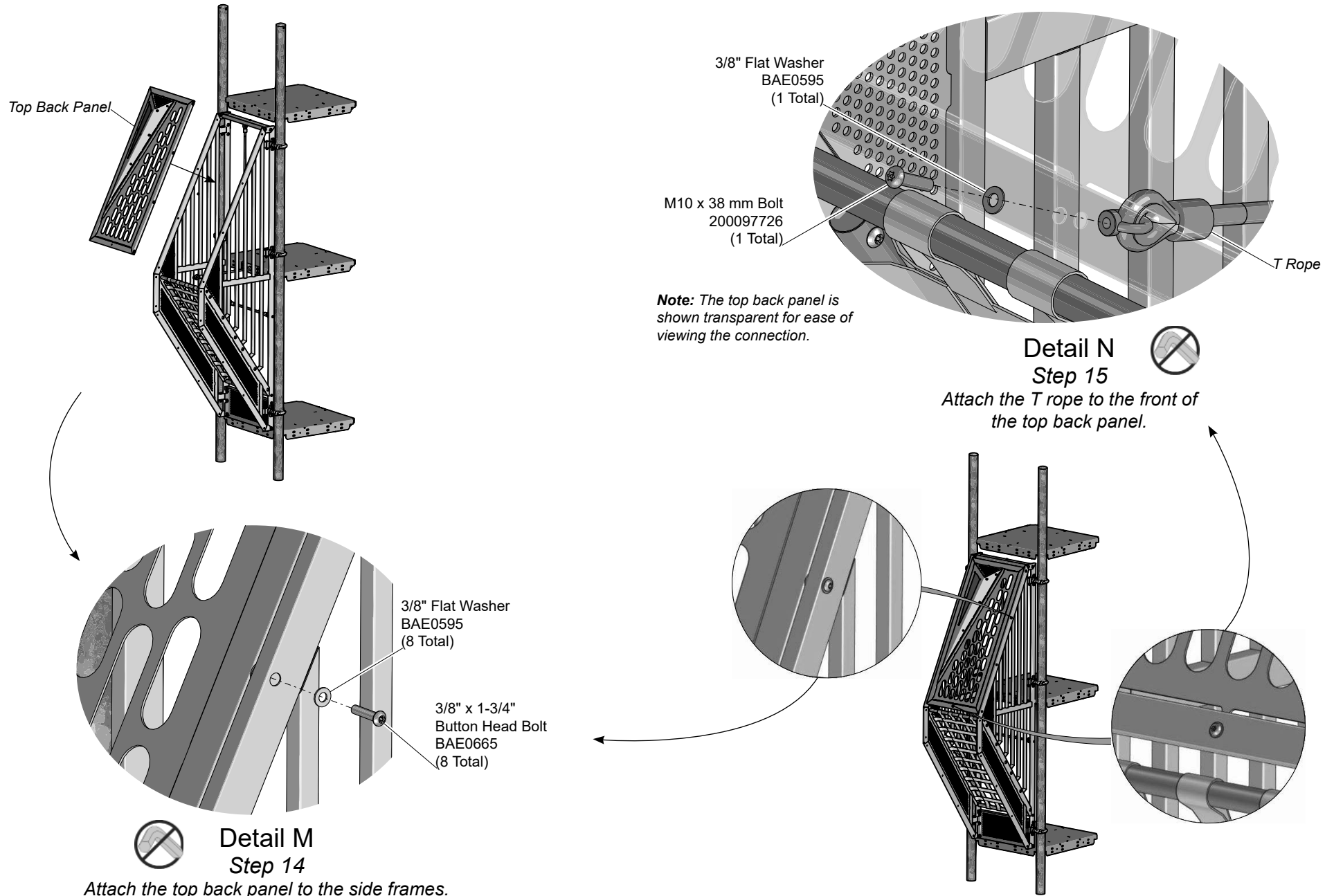
Back Panel Part Number	Window Panel Part Number	Mirror Panel Part Number	Quantity
AFR2546 (Top)	BFC4263	BFC4264	1
AFR2547 (Bottom)	BFC4263	BFC4265	1



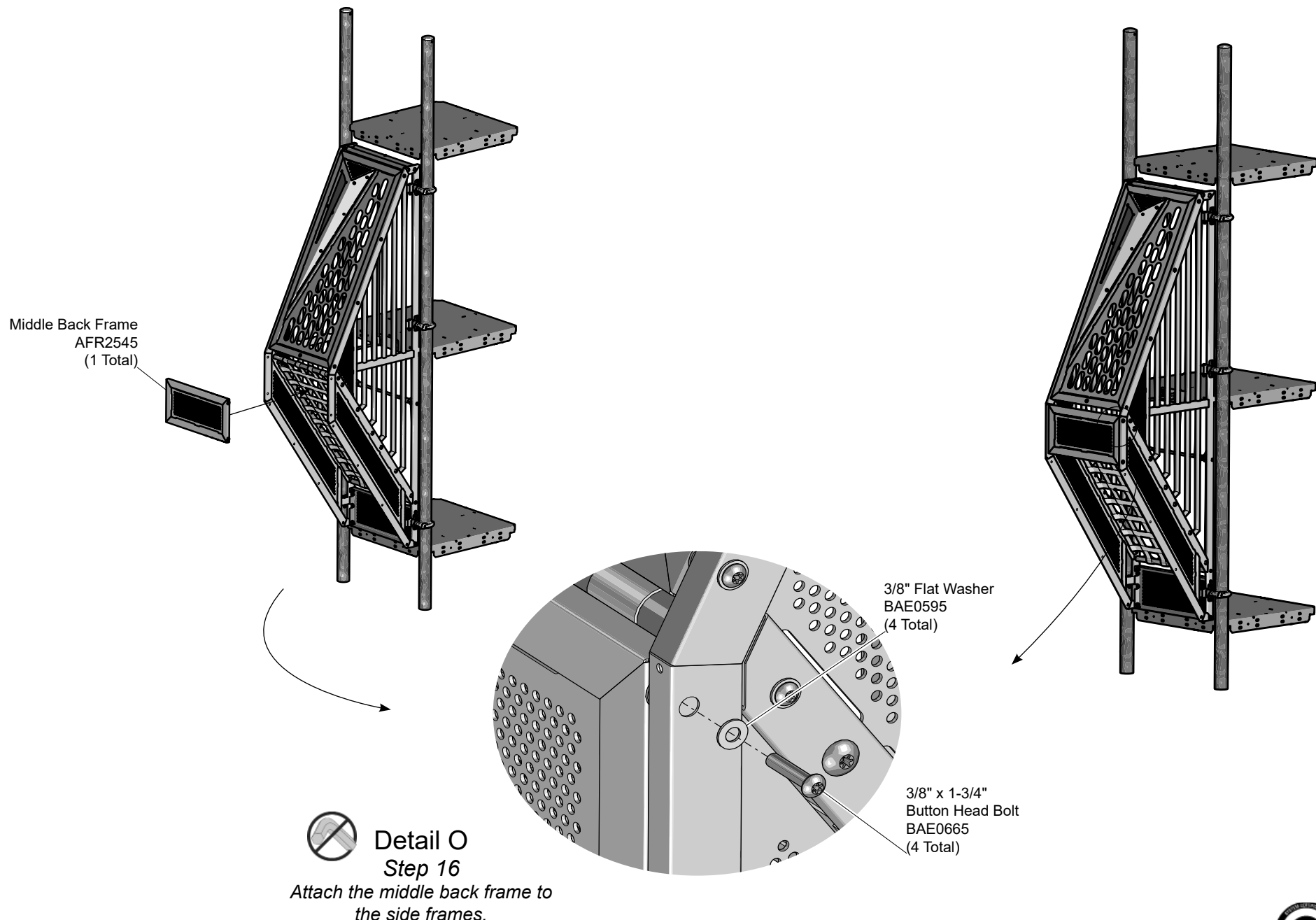
Attach the mirror and window panels to the back panels.



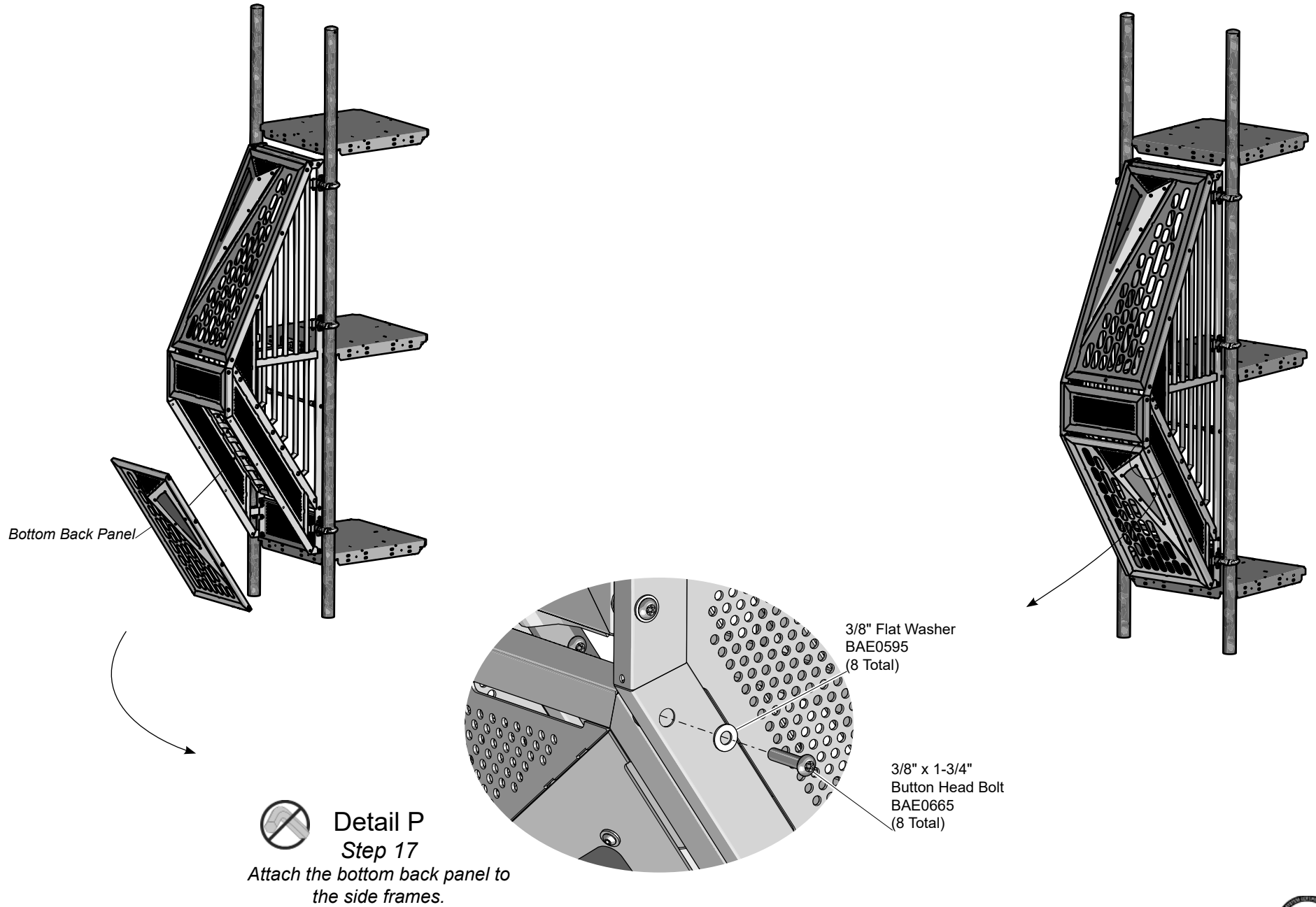
Installation Instructions



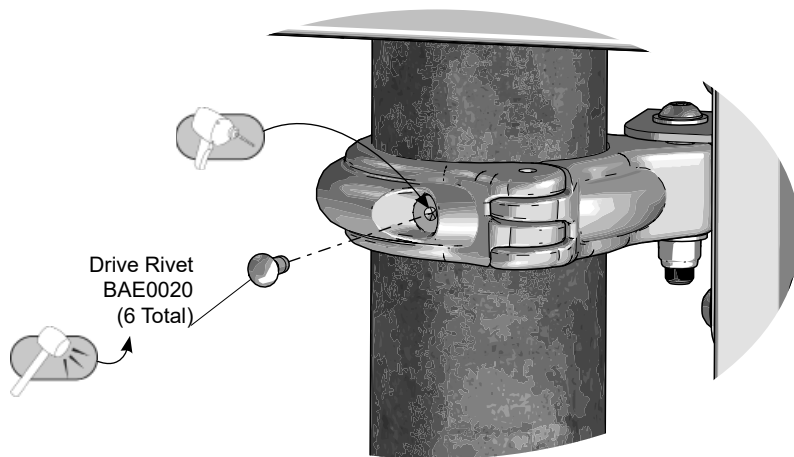
Installation Instructions



Installation Instructions

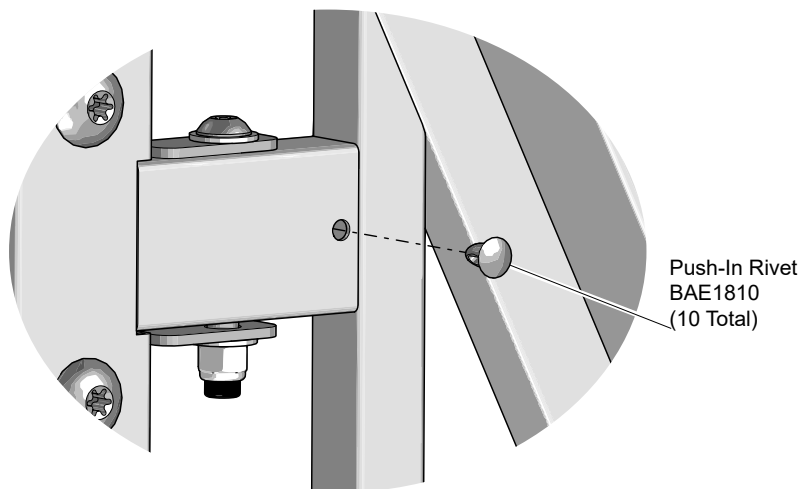


Installation Instructions



Detail Q
Step 19

Secure the clamps to the support posts.



Detail R
Step 20

Fill in open holes.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete unless otherwise instructed.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Attach the brackets to the outside of the side frames. See **Details A-1, A-2 and A-3**. Position the left and right brackets against the side frames and attach as shown.

Step 4: Attach the clamps to the deck hanger brackets. See **Detail B**. Place the clamp under the deck hanger bracket, and attach as shown.

Step 5: Attach the clamps to the support posts. See **Detail C**. With adequate manpower, lift the side frames into position, close the clamps around the support posts, and attach as shown. Refer to Elevation View for correct placement height.

Step 6: Assemble the flat web. See **Detail D**. Place the side rails and top and bottom rails through the flat web as shown.

Step 7: Attach the flat web to the side frames. See **Details E-1 and E-2**. Position the flat web between the side frames, and attach as shown.

Step 8: Attach the top rail frame to the side frames. See **Detail F**. Position the top rail frame between the top of the side frames, align the holes, and attach as shown.

Step 9: Attach the bottom bracket to the side frames. See **Detail G**. Position the bottom bracket between the bottom of the side frames, and attach as shown.

Step 10: Attach the 27 inch rope to the side frames. See **Detail H**. Place the rope between the side frames, and attach as shown.

Step 11: Attach the rope deck bracket to the middle deck. See **Detail J**. Place the rope deck bracket against the middle holes in the deck, and attach as shown.

Step 12: Attach the T Rope to the assembly. See **Details K-1 and K-2**. Attach the rope to the top rail frame as shown and attach to the rope deck bracket as shown.

Note: The other end of the rope will be attached to a panel in Step 15.

Step 13: Attach the mirror and window panels to the back panels. See **Detail L**. Position the mirror and window panels against the inside of the back panels, and attach as shown.

Step 14: Attach the top back panel to the side frames. See **Detail M**. Position the top back panel between the top of the side frames, and attach as shown.

Note: The side of the panel with the mirror and window panels should face inside towards the decks.

Step 15: Attach the T Rope to the front of the top back panel. See **Detail N**. Align the rope with the hole on the panel, and attach as shown.

Step 16: Attach the middle back frame to the side frames. See **Detail O**. Position the middle back frame between the middle of the side frames, and attach as shown.

Step 17: Attach the bottom back panel to the side frames. See **Detail P**. Position the bottom back panel between the bottom of the side frames, and attach as shown.

Note: The side of the panel with the mirror and window panels should face inside towards the decks.

Final Details.

Step 18: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 19: Install drive rivets. See **Detail Q**. After the equipment assembly is complete, install a drive rivet in each pipe clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Step 20: Fill in open holes. See **Detail R**. Push rivets into open holes on side frames.

CH6730 - KALEIDO CLIMBER

PART NO.	DESCRIPTION	QTY.
200097726	BOLT - M10 x 1.5 MALE 38mm	4
AAU0230	CLAMP - 3.50" DECK HANGER DIE CAST	6
ABC1202	BRACKET - 3.62" x 2.50" x 4.50" (LEFT)	3
ABC1203	BRACKET - 3.62" x 2.50" x 4.50" (RIGHT)	3
AFM8894	FAB METAL - 1.315" O.D. x 48.88" CAPPED	2
AFM9689	FAB METAL - 1.315" O.D. x 27.00" w/INSERTS	2
AFR2269	FRAME - 1.00" x 34.00" x 115.00"	2
AFR2544	FRAME - 27.00" x 5.25" x 2.00"	1
AFR2545	FRAME - 27.00" x 12.99" x 1.00"	1
AFR2546	FRAME - 61.00" x 27.00" x 4.34"	1
AFR2547	FRAME - 52.49" x 27.00" x 4.46"	1
AFR2557	FRAME - 11.00" x 3.50" x 2.31"	1
AMC1197	NET - FLAT WEB 54.22" x 27.00"	1
AMC1198	ROPE - 27.00"	1
AMC1201	ROPE - 16mm x 30.88" x 55.83"	1
APL3442	BRACKET - 1.88" x 11.25" x 27.00"	1
BAE0020	RIVET - 1/4" x 11/16" ALUMINUM DRIVE	6
BAE0158	WASHER - 1/4" SAE FLAT	18
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	18
BAE0595	WASHER - 3/8" SAE FLAT	80
BAE0600	1" O.D. X .437" I.D. STAINLESS STEEL FLAT WASHER	8
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	24
BAE0662	BOLT - 3/8"-16 x 1.25" TAMP RESIST w/TORX DRIVE	6
BAE0664	BOLT - 3/8"-16 x 1.00" BUTTON HEAD - SS	12
BAE0665	BOLT - 3/8"-16 x 1.75" BUTTON HEAD - SS	32
BAE0666	BOLT - 3/8"-16 x 1.25" BUTTON HEAD - SS	4
BAE01521	BOLT - 1/4"-20 x .50" BUTTON HEAD - SS	18
BAE1672	NUT - 3/8"-16 x 11/16" BUTTON HEAD	24
BAE1807	CONE WASHER - .89" O.D. x .39" I.D. x .20"	18
BAE1810	RIVET - PUSH IN WITH ARROW SHANK FOR .25 HOLE	10
BAE06675	BOLT - 3/8"-16 x 2.25" BUTTON HEAD - SS	18
BAE06681	BOLT - 3/8"-16 x 3.00" BUTTON HEAD - SS	6
BFC4263	COLOR POLYCARB - 22.59" x 7.57" x .25"	2
BFC4264	MIRROR - 26.61" x 3.26" x .25"	1
BFC4265	MIRROR - 23.85" x 3.94" x .25"	1



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Assembly View (representative model)

Installation Instructions

Challengers® Models CH6979 &
CH6986-CH6989


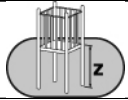

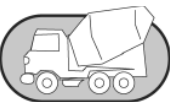
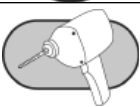

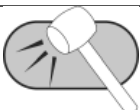
Inclined Cliff Hanger

48" (1219 mm), 60" (1524 mm),
72" (1829 mm), 84" (2134 mm)
& 96" (2438 mm) Deck Heights

Installation Preparation

Recommended Crew: Two (2) adults
Installation Time: 2 man-hours
Concrete Required: 0.06 cubic yard (0,05 cubic meters)
Use Zone: Refer to Master Drawing
User Group Age (years): 48"-60": ASTM/CSA: 2-12, EN: 2-14
..... 60"-96": ASTM/CSA: 5-12, EN: 6-14

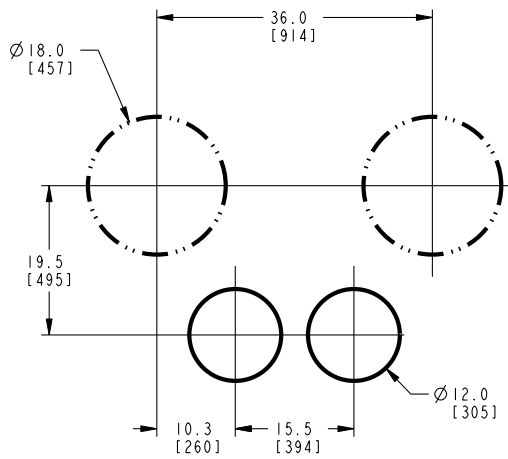
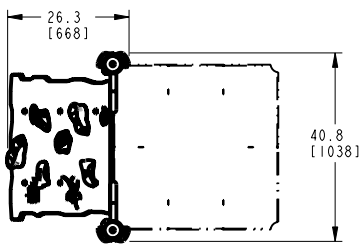
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

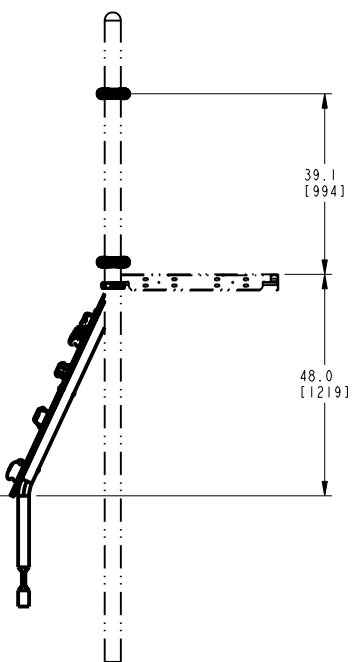
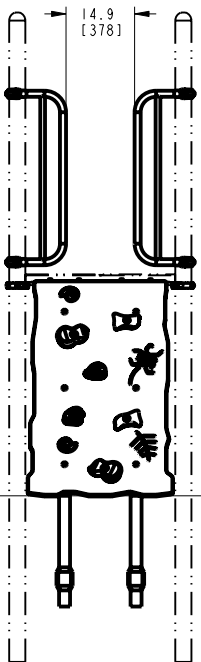
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

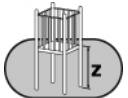
Top View



Footing Diagram



Elevation Views - CH6987 - 48" (1220 mm) Deck



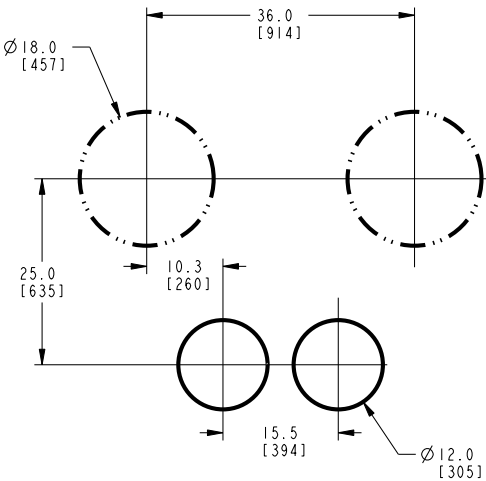
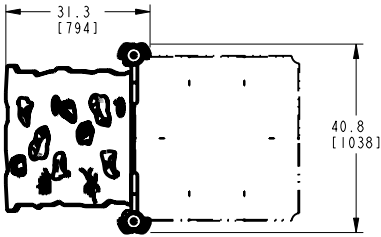
ASTM F1487: 48" (1219 mm)
 CSA-Z614: 1219 mm
 EN1176: 1219 mm



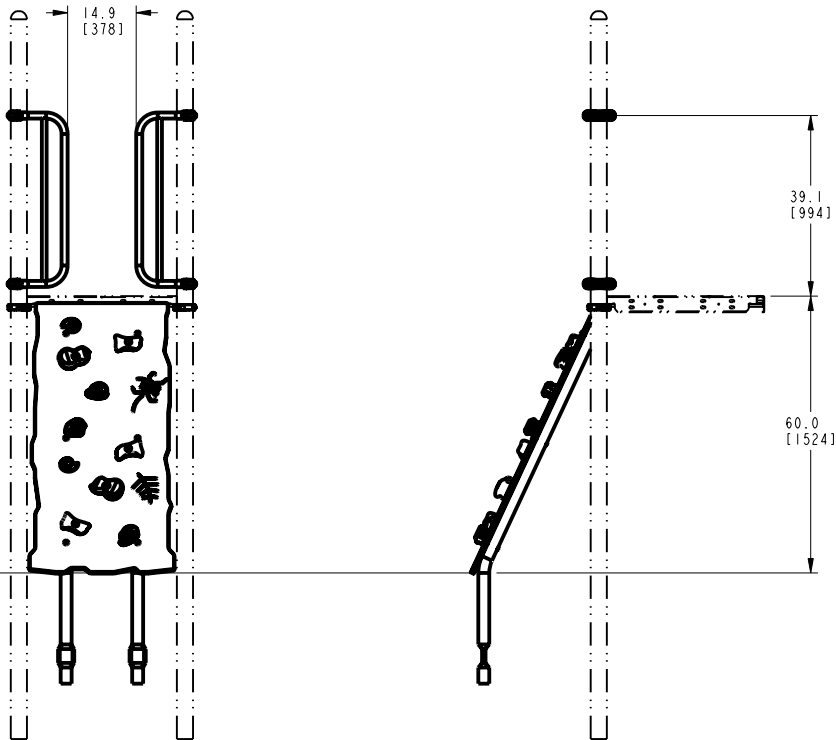
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

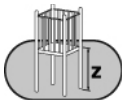
Top View



Footing Diagram



Elevation Views - CH6988 - 60" (1524 mm) Deck



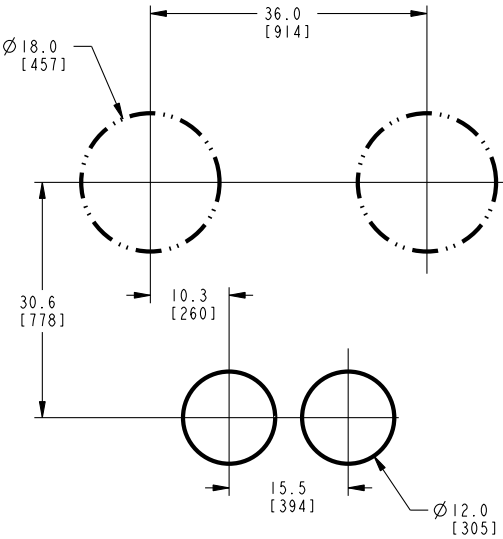
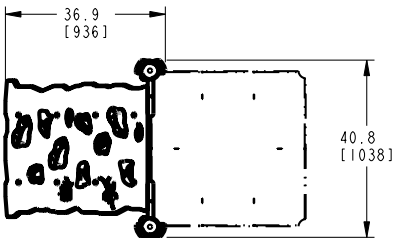
ASTM F1487: 60" (1524 mm)
 CSA-Z614: 1524 mm
 EN1176: 1524 mm



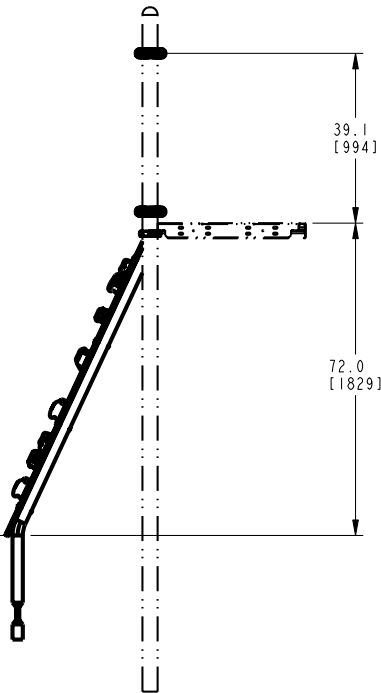
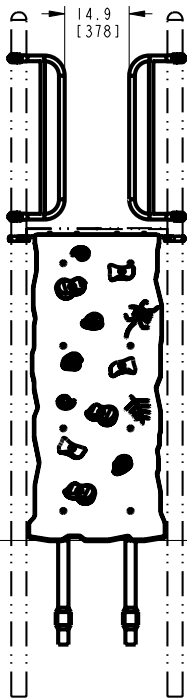
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

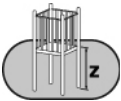
Top View



Footing Diagram



Elevation Views - CH6989 - 72" (1829 mm) Deck

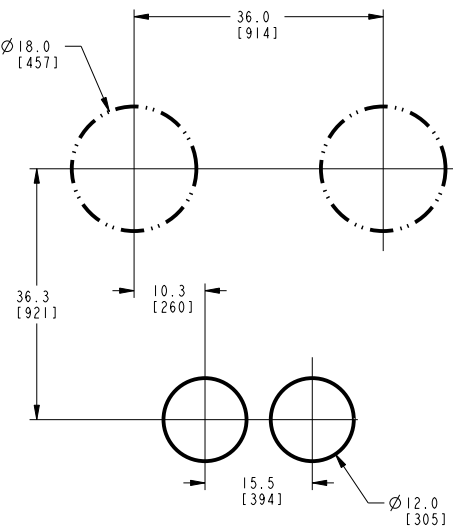
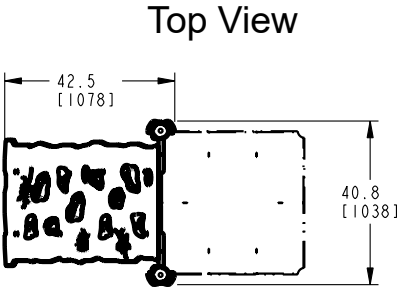


ASTM F1487: 72" (1829 mm)
CSA-Z614: 1829 mm
EN1176: 1829 mm

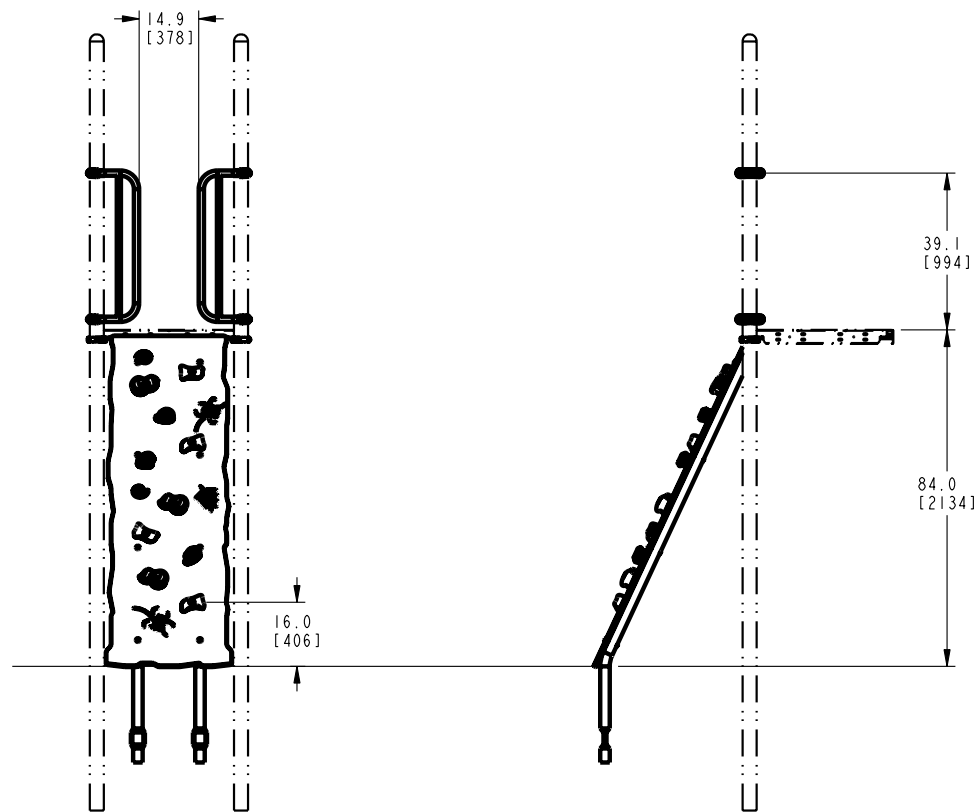


Installation Instructions

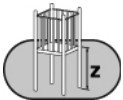
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram



Elevation Views - CH6986 - 84" (2134 mm) Deck



ASTM F1487: 84" (2134 mm)
CSA-Z614: 2134 mm
EN1176: 2134 mm

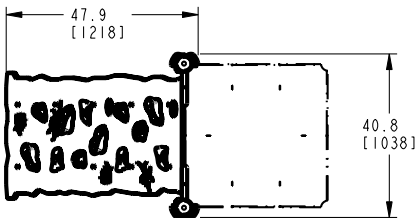


Installation Instructions

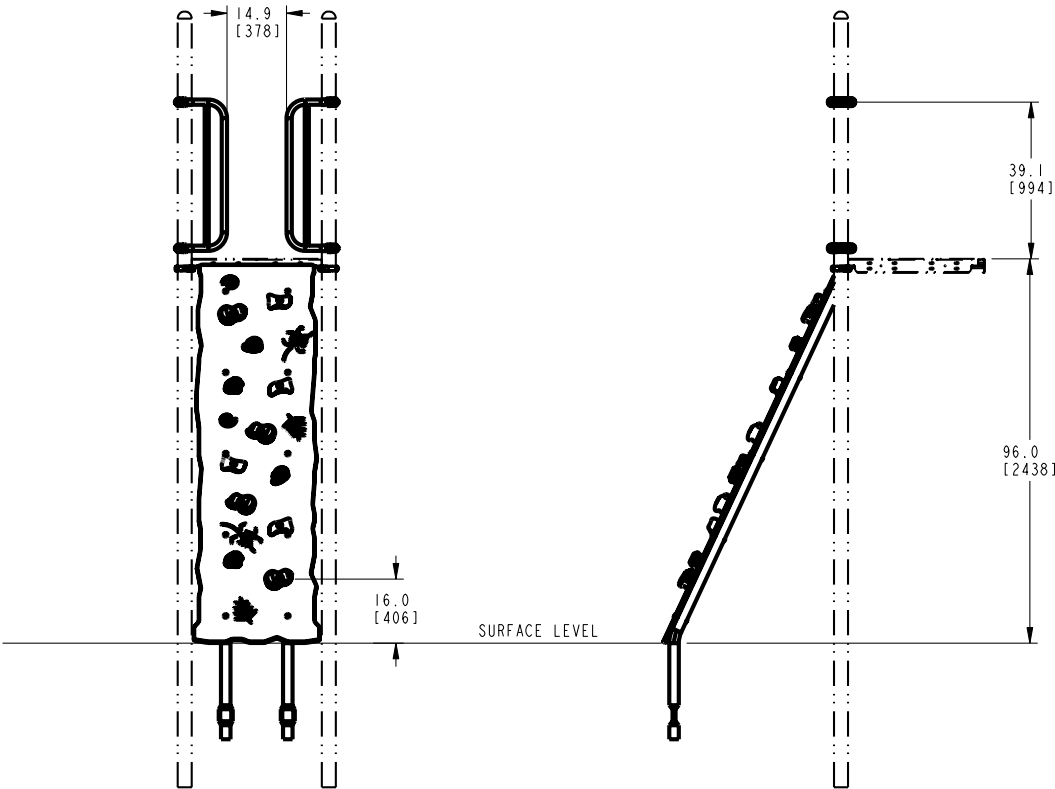
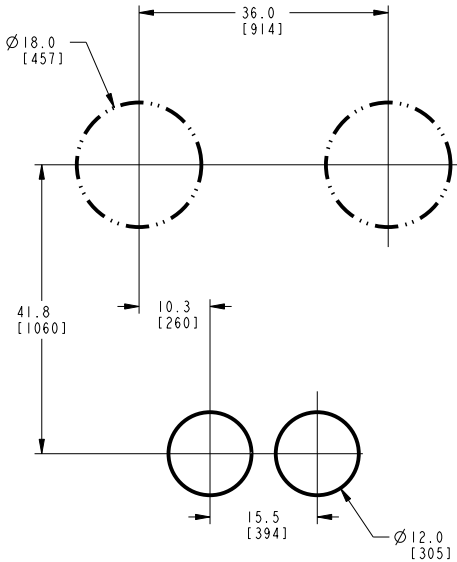
KEY

Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

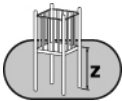
Top View



Footing Diagram



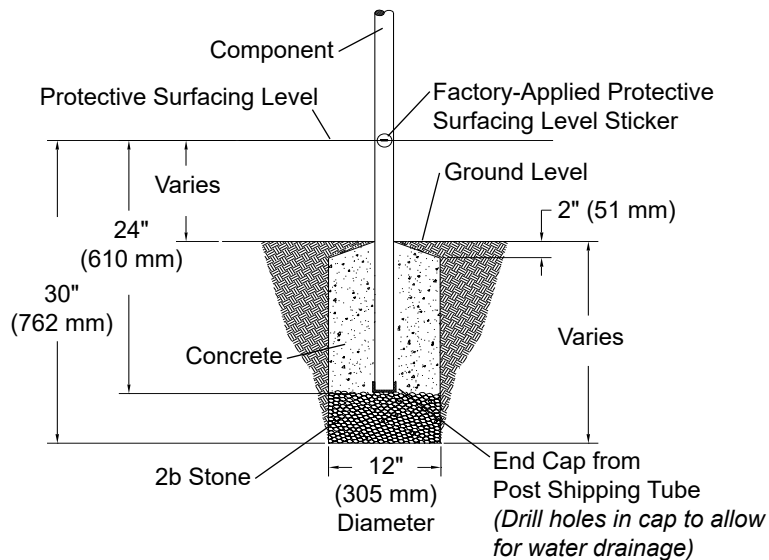
Elevation Views - CH6979 - 96" (2438 mm) Deck



ASTM F1487: 96" (2438 mm)
 CSA-Z614: 2438 mm
 EN1176: 2438 mm



Installation Instructions



Component Footing Detail (ASTM/CSA)

FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete.

Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).

GroundZero® posts are footed 12 in. (305 mm) deeper than the regular support posts, and will be marked as such on the master footing diagram.

- Component footing depth equals 30 in. (762 mm) less the depth of the protective surfacing material. The post is designed to have 12" (305 mm) in concrete.

Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 18 in. (457 mm).

- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.

- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.

- Do not encase bottom of support post in concrete. Place post directly on packed stone.

- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.

For example:

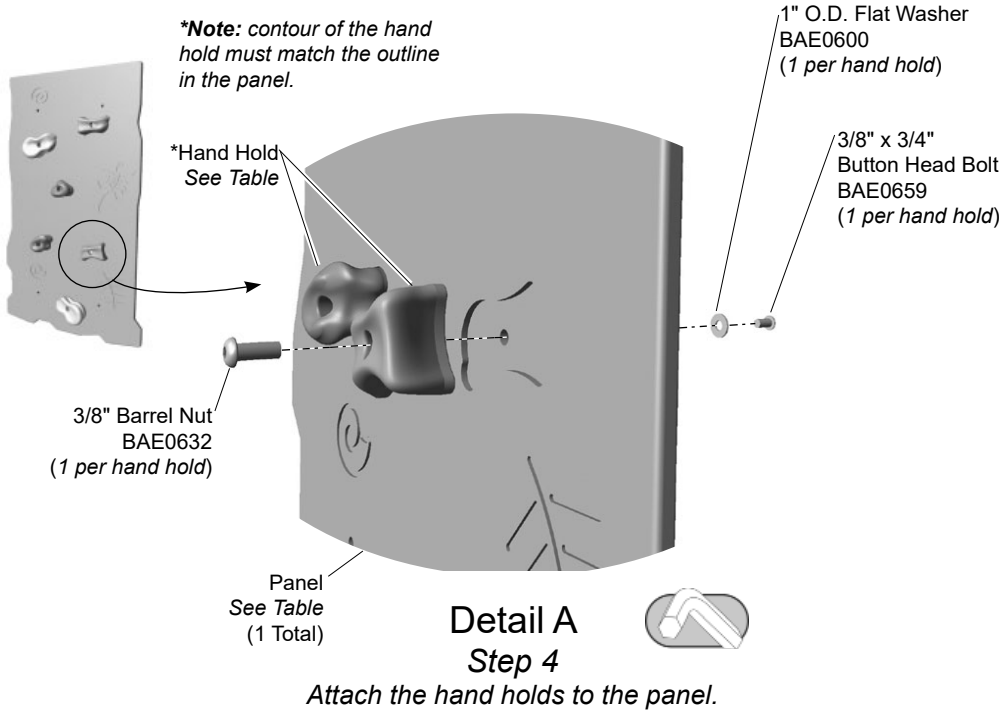
- If local soil is loose or unstable, a larger footing may be required.
- If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.

- Base of footing must be below frost line.

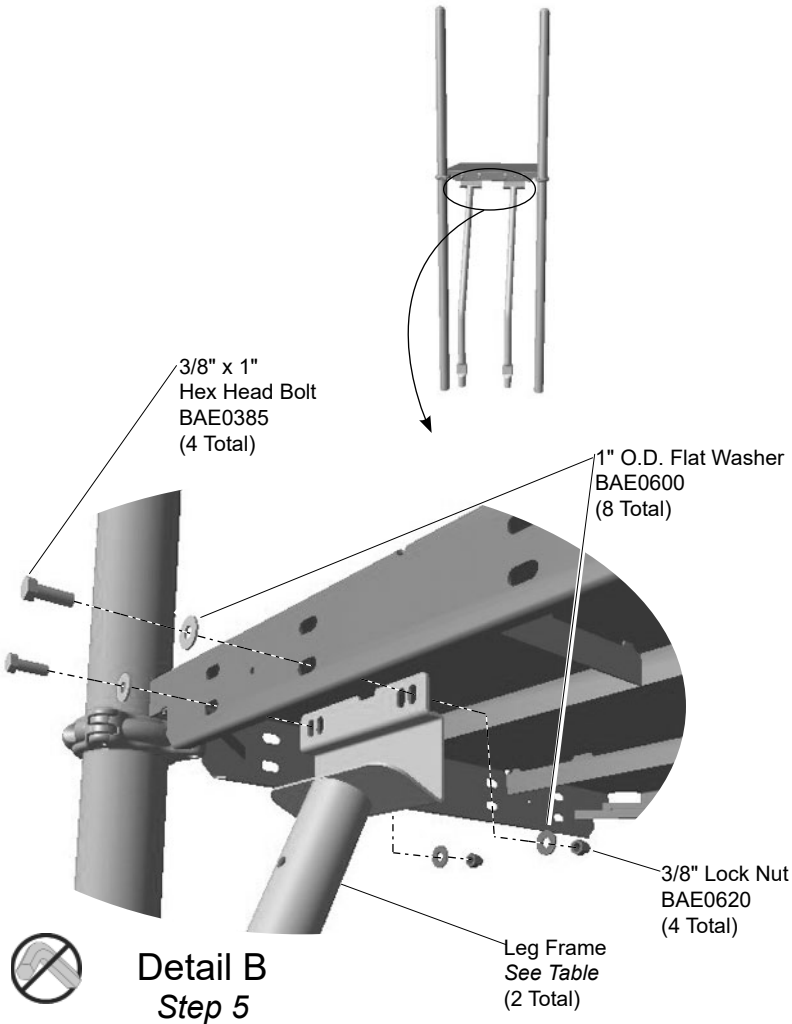
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 10.



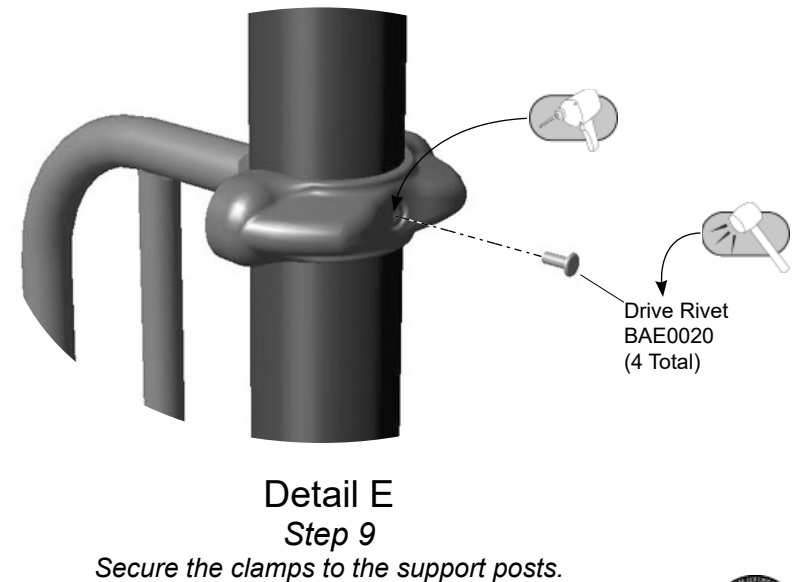
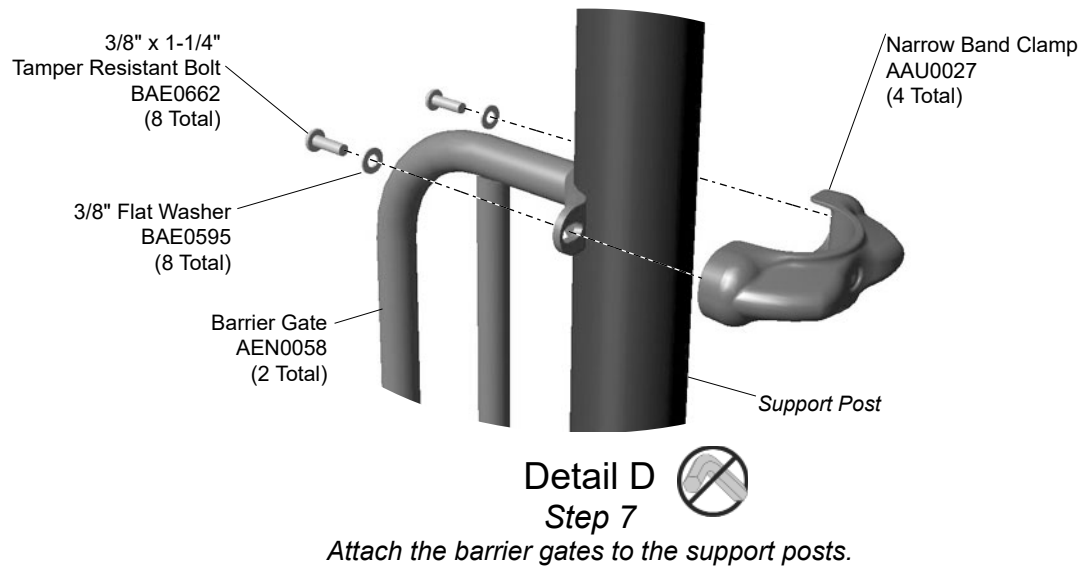
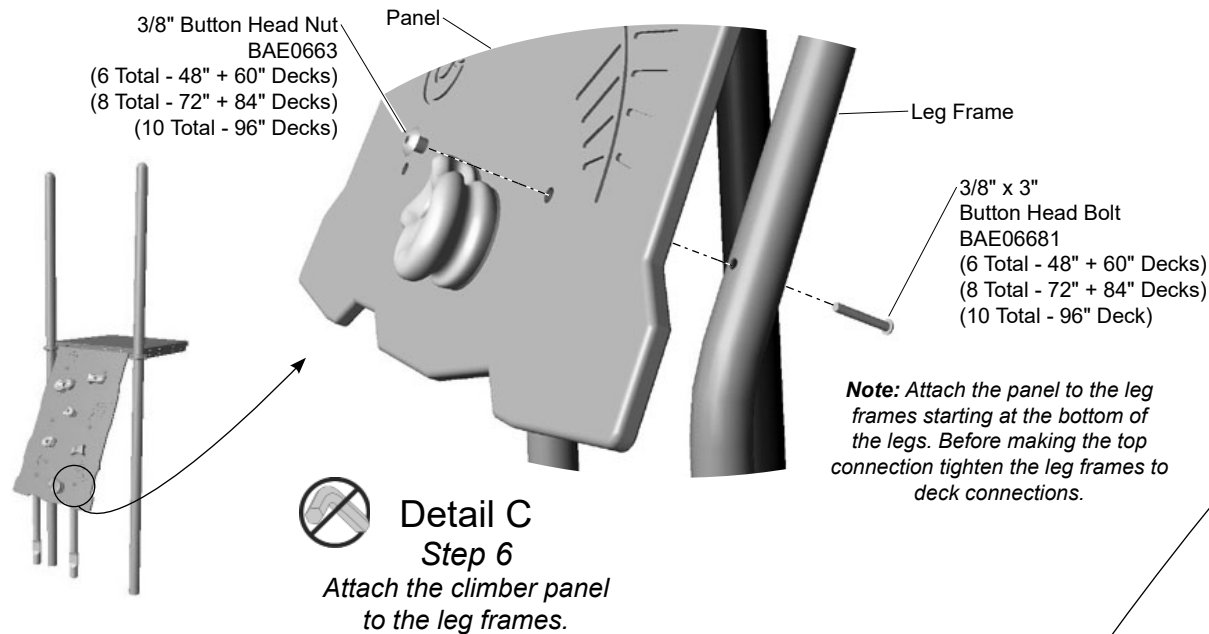
Model	CH6987	CH6988	CH6989	CH6986	CH6979
No. of Small Hand Holds (AAU0067)	2	3	3	3	4
No. of Medium Hand Holds (AAU0068)	2	3	3	4	4
No. of Large Hand Holds (AAU0069)	2	2	3	3	4
Panel Number	BFC3262	BFC3264	BFC3266	BFC3268	BFC3270



Model	CH6987	CH6988	CH6989	CH6986	CH6979
Leg Frame Part Number	AFR0956	AFR0958	AFR0960	AFR0962	AFR0964



Installation Instructions



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate the footings as shown in the **Component Footing Details** in the **Guidelines** at the beginning of this instruction book and on page 7 of this installation document.

Step 4: Attach the hand holds to the panel. See **Detail A**. Position each hand hold against a corresponding cutout in the panel and attach as shown. Fully tighten the hardware according to tightening torque specifications to pull the hand hold into the panel.

Torque Specifications:

Bolts and Nuts: Snug tighten and then tighten an additional one half turn.

Step 5: Attach the leg frames to the deck. See **Detail B**. Place the frame legs in their footings with the mounting bracket under the deck and align the lower holes. Use the slots indicated on each bracket and attach as shown.

Step 6: Attach the panel to the leg frames. See **Detail C**. Place the panel with the wider part at the bottom and align the side holes with the holes in the leg frames. Attach as shown.

Note: Attach the panel to the leg frames starting at the *bottom* of the legs. *Before making the top connection tighten the leg frames to deck connections.*

Step 7: Attach the barrier gates to the support posts. See **Detail D**. Place each gate against the post, and align a clamp with each gate band. Attach as shown. Leave the connections loose. Both gates should be mounted at the same height directly over the deck. The bottom of the gates must be less than 3.5" (89 mm) from the deck surface to prevent any entrapment issues.

Final Details.

Step 8: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Torque Specifications:

Bolts and Nuts: Snug tighten and then tighten an additional one half turn.

Step 9: Install drive rivets. See **Detail E**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Step 10: For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the component at eye level.

Bill of Materials

CH6987 - 48" (1219 mm) INCLINED CLIFF HANGER

PART NO.	DESCRIPTION	QTY.
AAU0027	CLAMP - 3-1/2" NARROW ALUMINUM BAND	4
AAU0067	HANDLE - SMALL	2
AAU0068	HANDLE - MEDIUM	2
AAU0069	HANDLE - LARGE	2
AEN0058	BARRIER - 10-7/16" x 6-3/8" x 37-15/16"	2
AFR0956	FRAME - 2.38" O.D. x 70.27" w/BRACKET	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0385	BOLT - 3/8"-16 x 1 HEX HEAD	4
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	14
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0632	NUT - 3/8"-16 x 1.25 BARREL w/PATCH	6
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	6
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	8
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	6
BAE06681	BOLT - 3/8"-16 x 3" BUTTON HEAD - SS	6
BFC3262	SHEET - .75" x 31.50" x 51.25"	1
ALB0025	LABEL - AGE APPROPRIATE SHEET	1

CH6988 - 60" (1524 mm) INCLINED CLIFF HANGER

PART NO.	DESCRIPTION	QTY.
AAU0027	CLAMP - 3-1/2" NARROW ALUMINUM BAND	4
AAU0067	HANDLE - SMALL	3
AAU0068	HANDLE - MEDIUM	3
AAU0069	HANDLE - LARGE	2
AEN0058	BARRIER - 10-7/16" x 6-3/8" x 37-15/16"	2
AFR0958	FRAME - 2.38" O.D. x 82.27" w/BRACKET	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0385	BOLT - 3/8"-16 x 1 HEX HEAD	4
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	16
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0632	NUT - 3/8"-16 x 1.25 BARREL w/PATCH	8
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	8
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	8
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	6
BAE06681	BOLT - 3/8"-16 x 3" BUTTON HEAD - SS	6
BFC3264	SHEET - .75" x 31.50" x 64.50"	1
ALB0025	LABEL - AGE APPROPRIATE SHEET	1



Bill of Materials

CH6989 - 72" (1829 mm) INCLINED CLIFF HANGER

PART NO.	DESCRIPTION	QTY.
AAU0027	CLAMP - 3-1/2" NARROW ALUMINUM BAND	4
AAU0067	HANDLE - SMALL	3
AAU0068	HANDLE - MEDIUM	3
AAU0069	HANDLE - LARGE	3
AEN0058	BARRIER - 10-7/16" x 6-3/8" x 37-15/16"	2
AFR0960	FRAME - 2.38" O.D. x 94.27" w/BACKET	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0385	BOLT - 3/8"-16 x 1 HEX HEAD	4
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	17
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0632	NUT - 3/8"-16 x 1.25 BARREL w/PATCH	9
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	9
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	8
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	8
BAE06681	BOLT - 3/8"-16 x 3" BUTTON HEAD - SS	8
BFC3266	SHEET - .75" x 31.50" x 77.75"	1
ALB0025	LABEL - AGE APPROPRIATE SHEET	1

CH6986 - 84" (2134 mm) INCLINED CLIFF HANGER

PART NO.	DESCRIPTION	QTY.
AAU0027	CLAMP - 3-1/2" NARROW ALUMINUM BAND	4
AAU0067	HANDLE - SMALL	3
AAU0068	HANDLE - MEDIUM	4
AAU0069	HANDLE - LARGE	3
AEN0058	BARRIER - 10-7/16" x 6-3/8" x 37-15/16"	2
AFR0962	FRAME - 2.38" O.D. x 106.27" w/BACKET	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0385	BOLT - 3/8"-16 x 1 HEX HEAD	4
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	18
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0632	NUT - 3/8"-16 x 1.25 BARREL w/PATCH	10
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	10
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	8
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	8
BAE06681	BOLT - 3/8"-16 x 3" BUTTON HEAD - SS	8
BFC3268	SHEET - .75" x 31.50" x 91.00"	1
ALB0025	LABEL - AGE APPROPRIATE SHEET	1

CH6979 - 96" (2438 mm) INCLINED CLIFF HANGER

PART NO.	DESCRIPTION	QTY.
AAU0027	CLAMP - 3-1/2" NARROW ALUMINUM BAND	4
AAU0067	HANDLE - SMALL	4
AAU0068	HANDLE - MEDIUM	4
AAU0069	HANDLE - LARGE	4
AEN0058	BARRIER - 10-7/16" x 6-3/8" x 37-15/16"	2
AFR0964	FRAME - 2.38" O.D. x 118.27" w/BACKET	2 1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	4
BAE0385	BOLT - 3/8"-16 x 1 HEX HEAD	4
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	20
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0632	NUT - 3/8"-16 x 1.25 BARREL w/PATCH	12
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	12
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	8
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	10
BAE06681	BOLT - 3/8"-16 x 3" BUTTON HEAD - SS	10
BFC3270	SHEET - .75" x 31.50" x 104.00"	1
ALB0025	LABEL - AGE APPROPRIATE SHEET	1



The world needs play.

For Customer Service, Call
800-233-8404 or
570-522-9800 OUTSIDE U.S.
1000 Buffalo Road • Lewisburg, PA 17837
www.playworldsystems.com





Assembly View (representative model)

Model	Deck Height
ZZCH7160	72" (1830 mm)
ZZCH7166	84" (2134 mm)
ZZCH7167	96" (2743 mm)

Installation Instructions

Challengers® Models CH7160,
CH7166, and CH7167


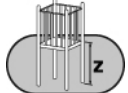

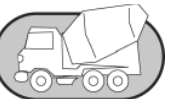


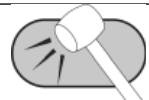
Twisted Climber

6 ft. (1829 mm), 7 ft. (2134 mm), and 8 ft. (2438 mm)

Installation Preparation

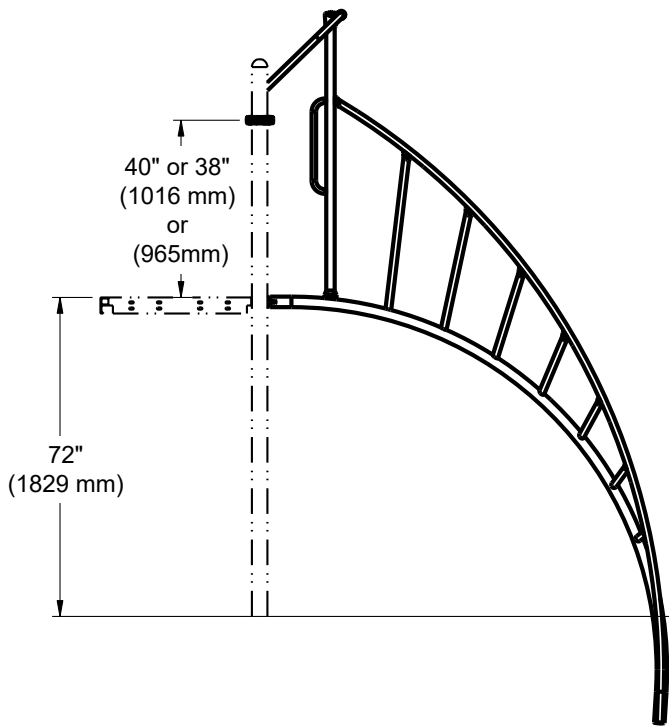
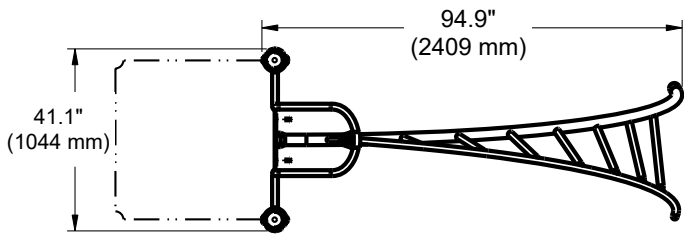
Recommended Crew: Two (2) adults
 Installation Time: 2 installation-hours
 Concrete Required: 0.6 cubic yard (0,4 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 5-12, EN: 6-14

ICON KEY

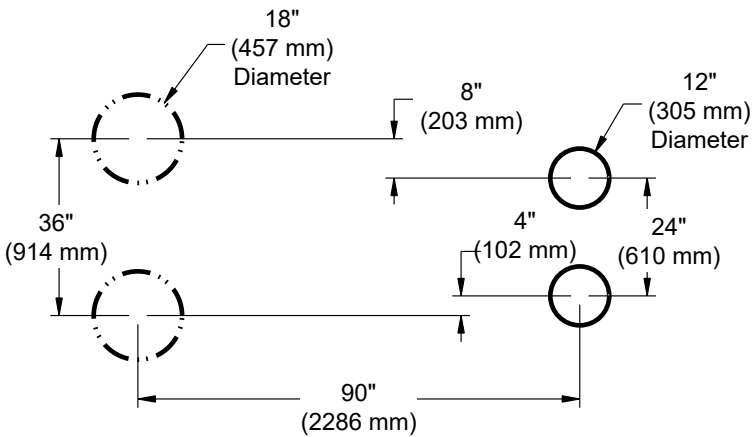
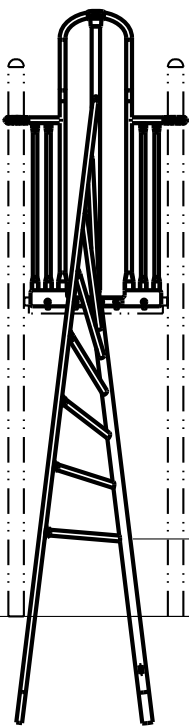
	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

Installation Instructions

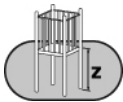
Top View



Elevation Views
ZZCH7160



Footing Diagram
All Models

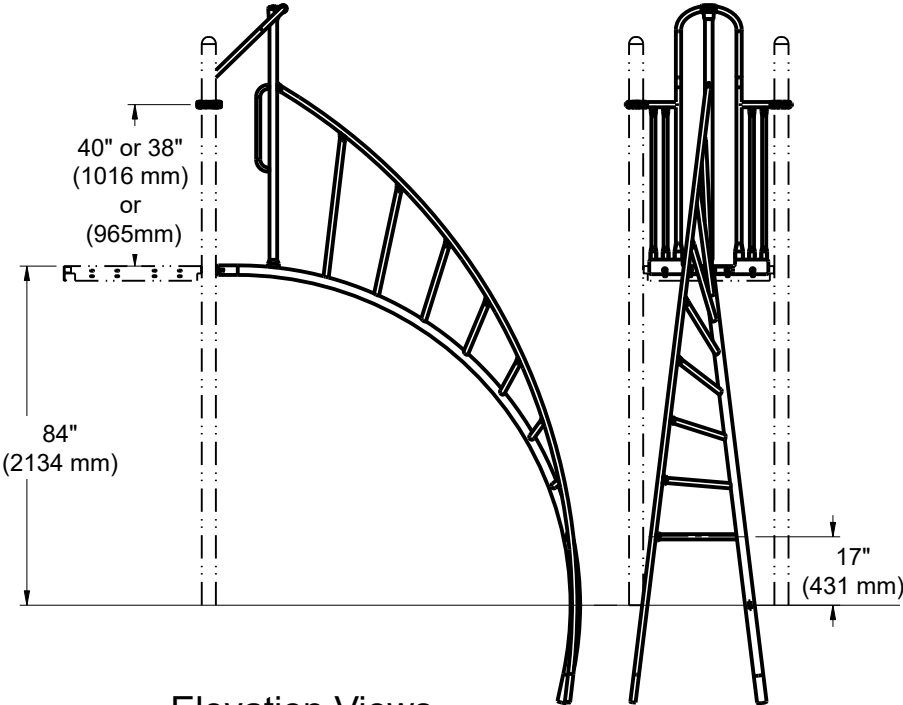
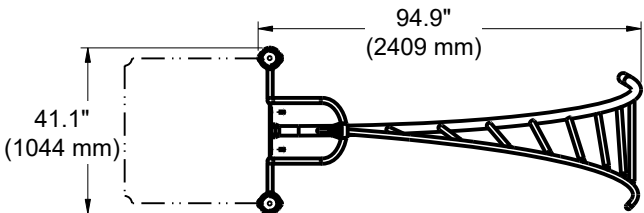


ASTM F1487: 72" (1829 mm)
CSA-Z614: 1829 mm
EN1176: 1829 mm

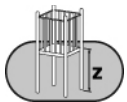


Installation Instructions

Top View

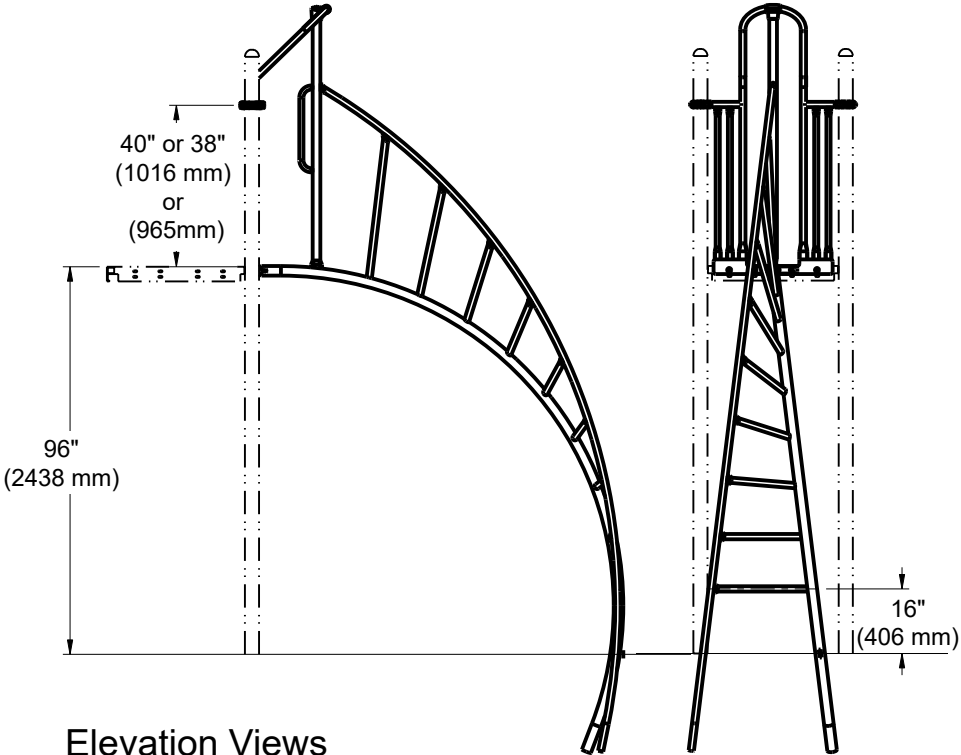
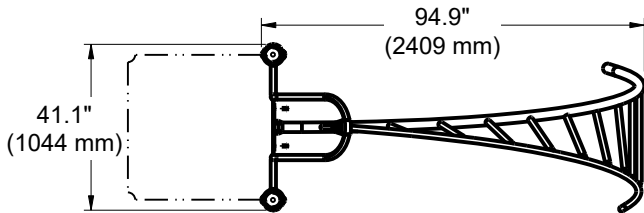


Elevation Views
ZZCH7166

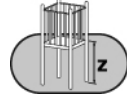


ASTM F1487: 84" (2134 mm)
CSA-Z614: 2134 mm
EN1176: 2134 mm

Top View



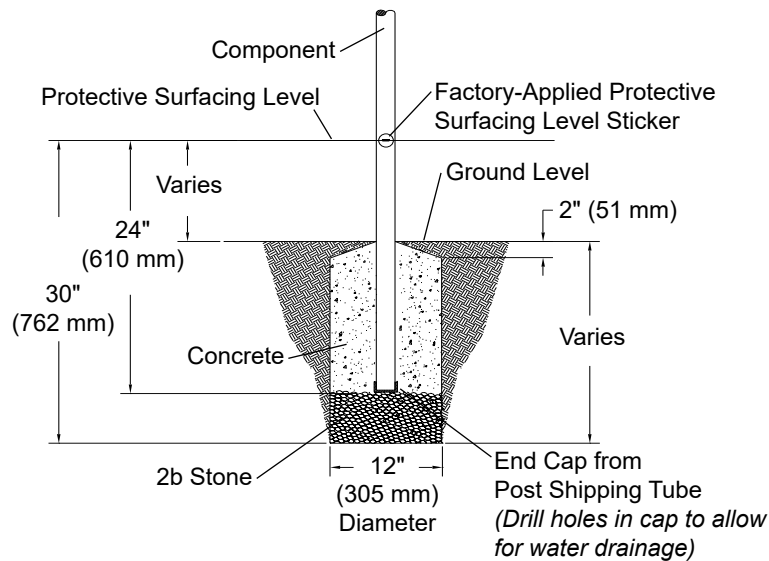
Elevation Views
ZZCH7167



ASTM F1487: 96" (2438 mm)
CSA-Z614: 2438 mm
EN1176: 2438 mm



Installation Instructions



Component Footing Detail (ASTM/CSA)

FOOTING NOTES

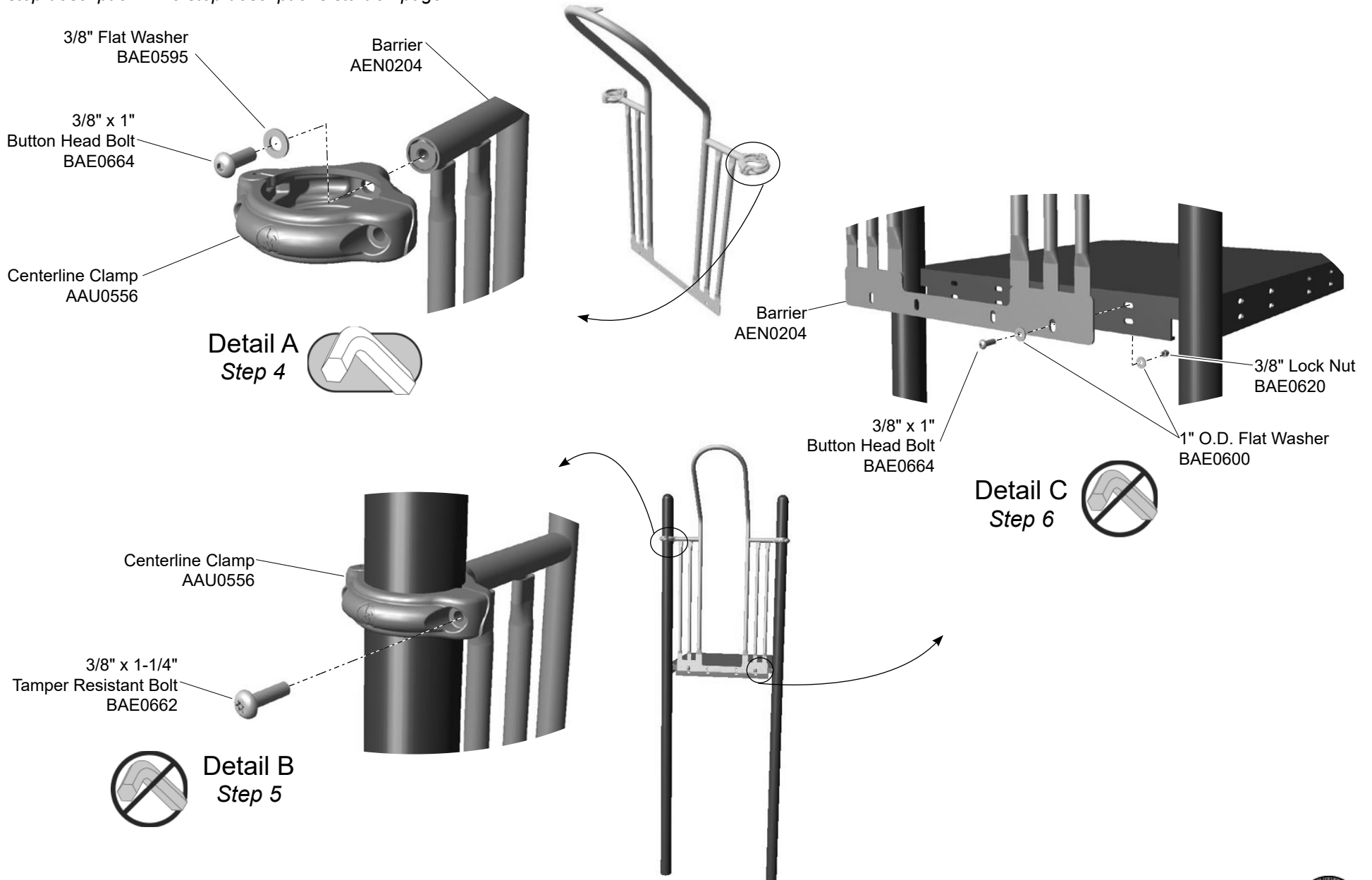
- Component footing depth equals 30 in. (762 mm) less the depth of the protective surfacing material. The post is designed to have 12" (305 mm) in concrete.

Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 18 in. (457 mm).

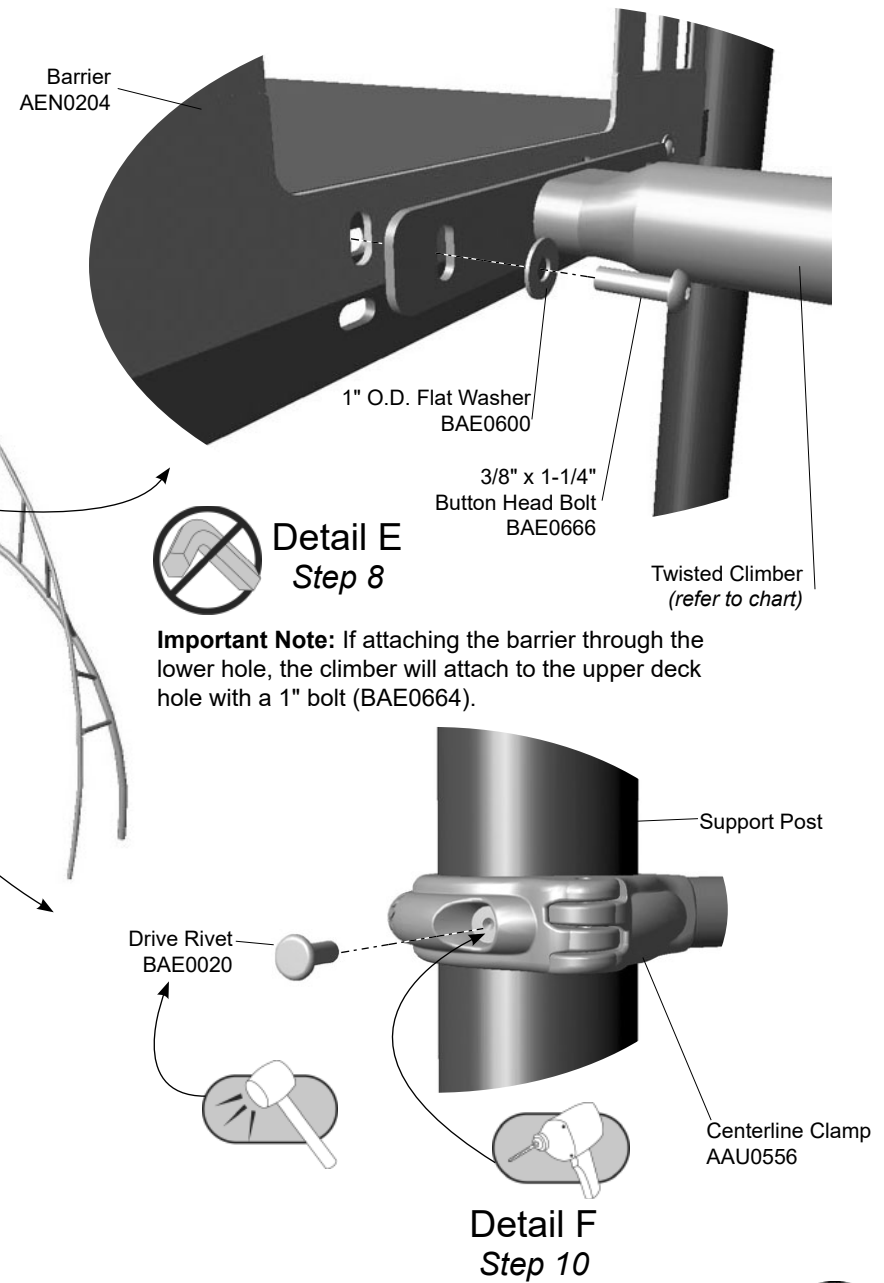
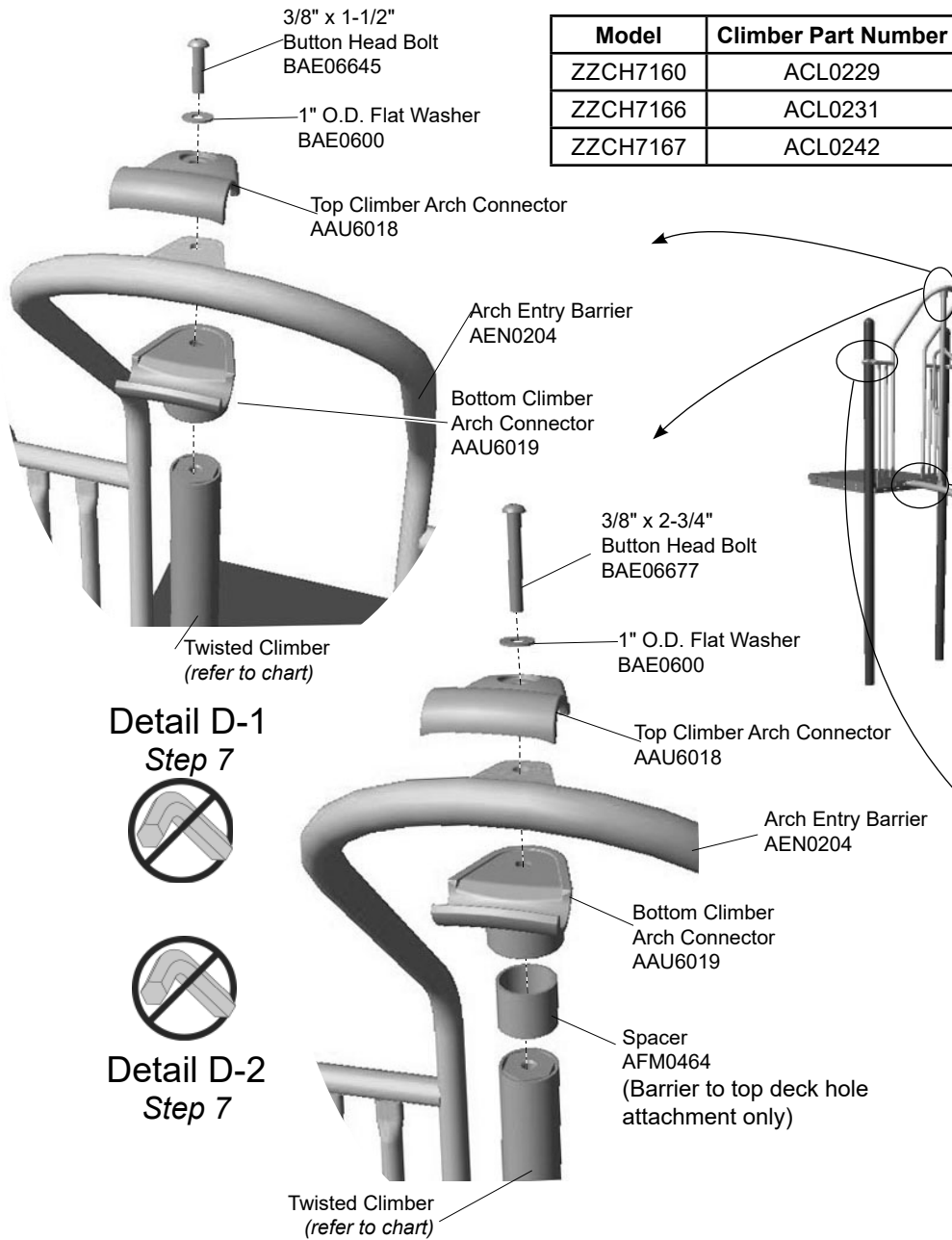
- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 7.



Installation Instructions



Installation Instructions

__Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

__Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

__Step 2: Separate and identify all components and hardware.

__Step 3: Excavate footings as shown in the **Component Footing Details** in the *Challenger Guidelines* and on page 4 of this installation document.

Attach the clamps to the arch entry barrier.

__Step 4: Attach the clamps to the barrier. See **Detail A**. Select the arch entry barrier, centerline clamps, and the appropriate hardware. There are (2) two connections. Position the neck of each clamp against an end of the barrier top rail and align holes. Attach as shown. Turn the clamp so that the hinge faces away from the entry, and fully tighten bolt.

Attach the clamps to the support posts.

__Step 5: Attach the clamps to the posts. See **Detail B**. Select the appropriate hardware. There are (2) two connections. Lift the barrier into position against deck and close the clamps around the posts. Insert and thread each bolt into a clamp. Leave the clamp connection loose for deck connection adjustments.

Attach the barrier to the deck.

__Step 6: Attach the barrier to the deck. See **Detail C**. Select the appropriate hardware. There are (2) two connections. *Attach only the outside holes*. The barrier can be attached to either the *upper* or *lower* deck holes to avoid conflicts with adjacent clamps. Attach as shown.

Note: The upper or lower deck attachment will effect connections in **Step 7**.

Attach the climber to the barrier.

__Step 7: Attach the climber to the top of the barrier. See **Details D-1 and D-2**. Select the climber, the top and bottom climber connectors, the spacer, and the appropriate hardware. There is (1) one connection. Place the climber into the excavated footing. Align the climber with the holes in the barrier. If the barrier is mounted to the lower deck holes, *do not use the spacer*. Refer to **Detail D-1**. If the barrier is mounted in the *upper* set of deck holes, *use the spacer as shown*. Refer to **Detail D-2**. Do not fully tighten the connection.

__Step 8: Attach the climber to the barrier/deck. See **Detail E**. Select the appropriate hardware. There are (2) two connections. Align the climber with the holes in the barrier. Attach as shown.

Important Note: If the barrier is attached through the lower hole in **Step 6**, the climber will attach to the upper deck hole with a 1" bolt (BAE0664).

Final Details.

__Step 9: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

__Step 10: Install drive rivets. See **Detail F**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

CH7160 - 6 ft. (1829 mm) TWISTED CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
AAU6018	CONNECTOR - CLIMBER ARCH TOP	1
AAU6019	CONNECTOR - CLIMBER ARCH BOTTOM	1
ACL0229	CLIMBER - 6' TWISTED	1
AEN0204	BARRIER - ARCH ENTRY 66-15/32" x 30-1/2"	1
AFM0464	CUT TUBING - 1.90" O.D. x 1.50"	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	13
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	2
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - SS	1

CH7167 - 8 ft. (2438 mm) TWISTED CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
AAU6018	CONNECTOR - CLIMBER ARCH TOP	1
AAU6019	CONNECTOR - CLIMBER ARCH BOTTOM	1
ACL0242	CLIMBER - 8' TWISTED	1
AEN0204	BARRIER - ARCH ENTRY 66-15/32" x 30-1/2"	1
AFM0464	CUT TUBING - 1.90" O.D. x 1.50"	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	13
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	2
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - SS	1

CH7166 - 7 ft. (2134 mm) TWISTED CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
AAU6018	CONNECTOR - CLIMBER ARCH TOP	1
AAU6019	CONNECTOR - CLIMBER ARCH BOTTOM	1
ACL0231	CLIMBER - 7' TWISTED	1
AEN0204	BARRIER - ARCH ENTRY 66-15/32" x 30-1/2"	1
AFM0464	CUT TUBING - 1.90" O.D. x 1.50"	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	13
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	6
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	2
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - SS	1





Assembly View (representative model)

Model	Deck Height
ZZCH7168	72" (1829 mm)
ZZCH7169	84" (2134 mm)
ZZCH7170	96" (2438 mm)

Installation Instructions

Challengers® Models CH7168,
CH7169, and CH7170

Tower Climber

6 ft. (1829 mm), 7 ft. (2134 mm), and 8 ft. (2438 mm)

Installation Preparation

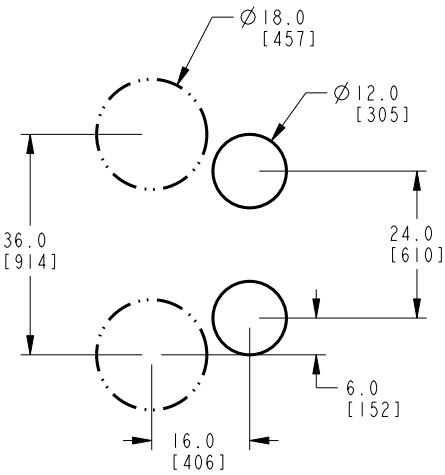
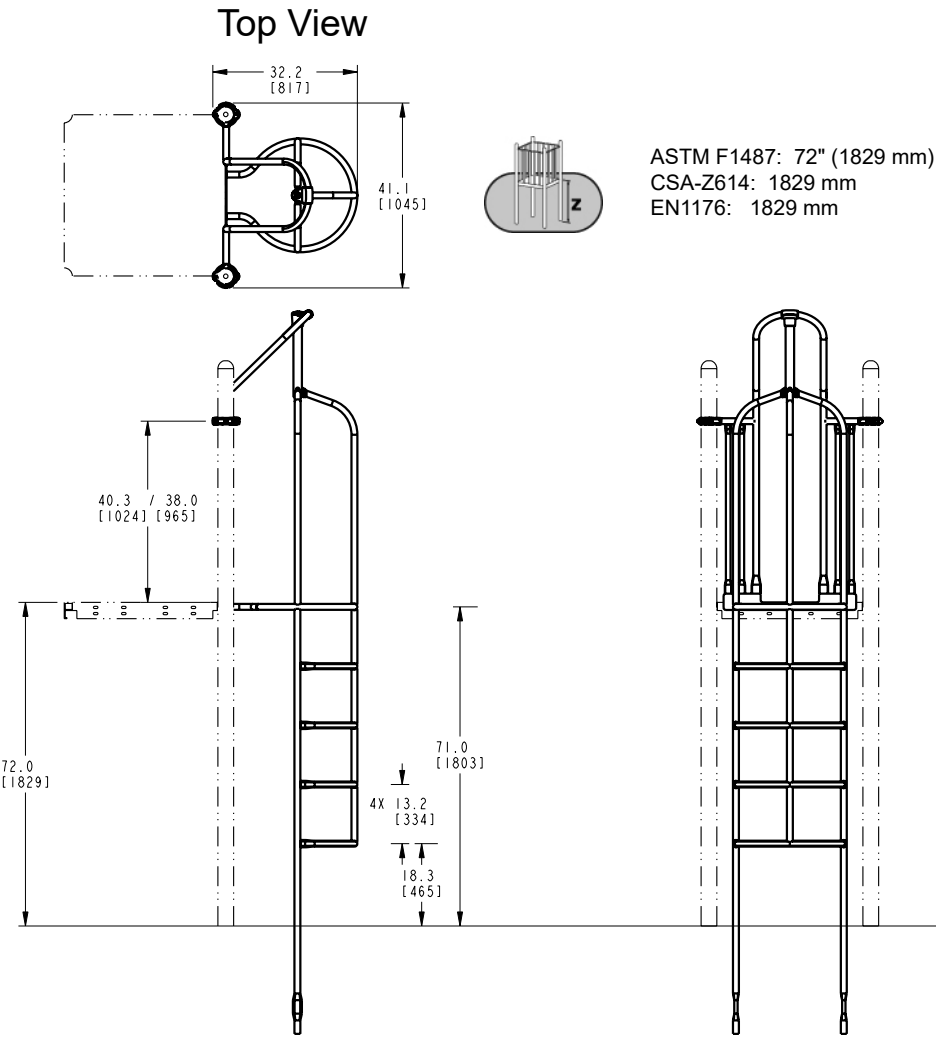
Recommended Crew: Two (2) adults
 Installation Time: 2 man-hours
 Concrete Required: 0.06 cubic yard (0,04 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 5-12, EN: 6-14

ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram
All Models

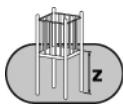
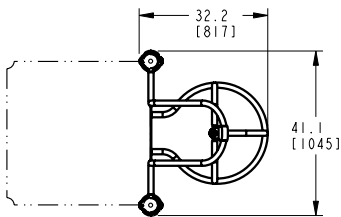
Elevation Views
ZZCH7168



Installation Instructions

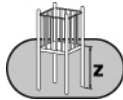
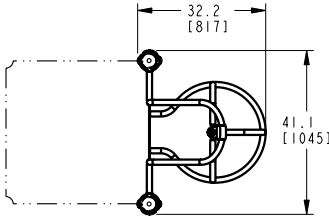
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View

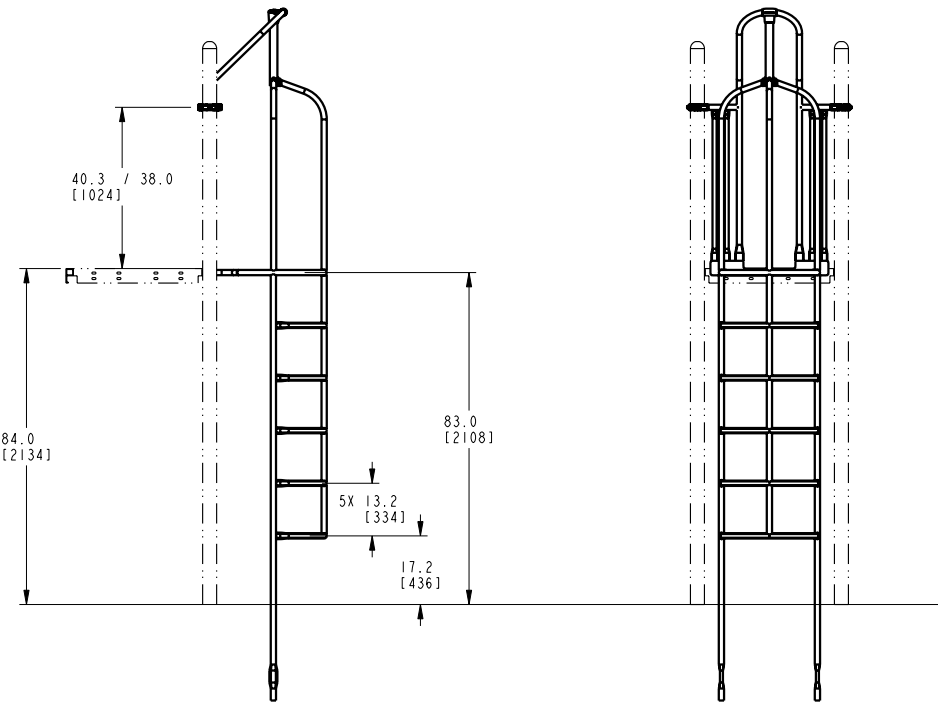


ASTM F1487: 84" (mm)
CSA-Z614: 2134 mm
EN1176: 2134 mm

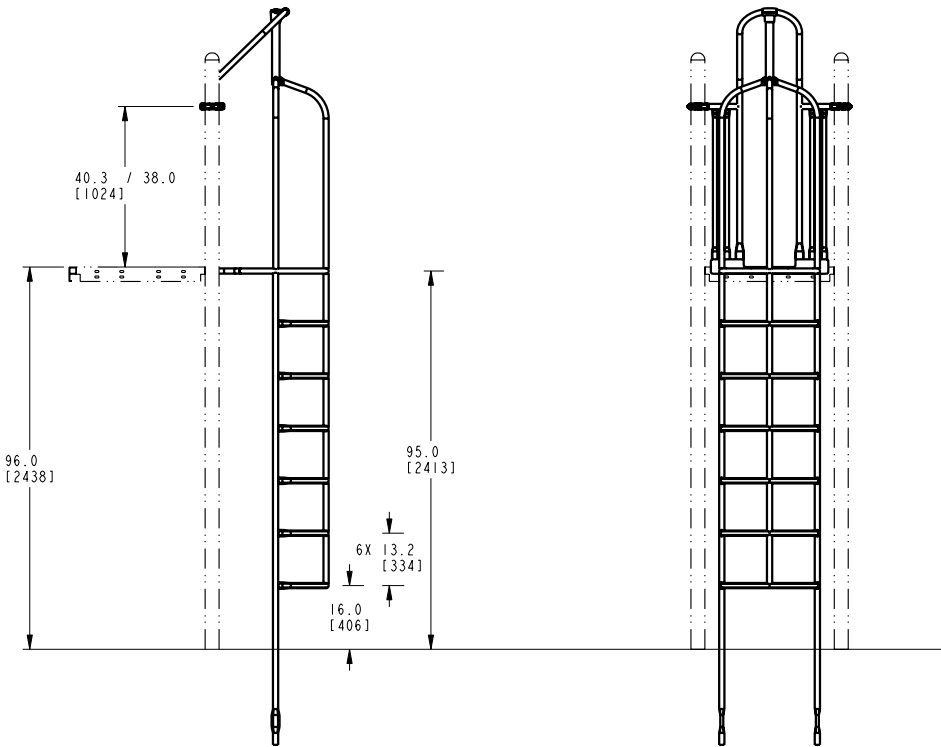
Top View



ASTM F1487: 96" (2438 mm)
CSA-Z614: 2438 mm
EN1176: 2438 mm



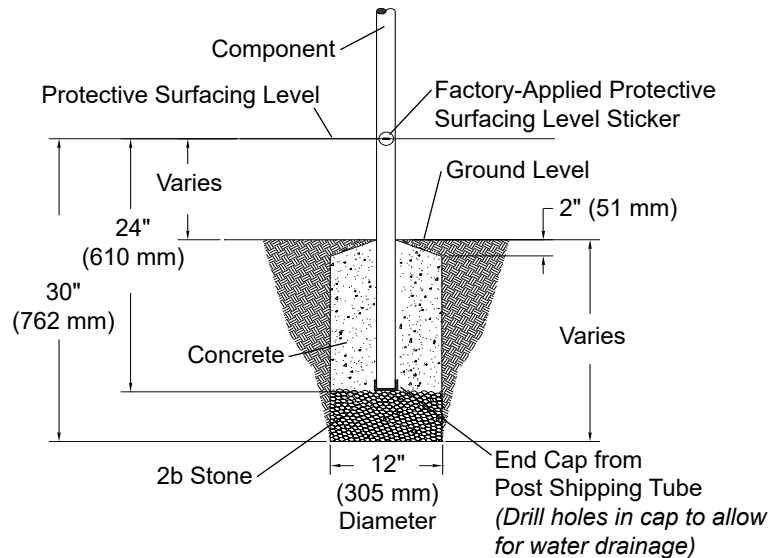
Elevation Views
ZZCH7169



Elevation Views
ZZCH7170



Installation Instructions



Component Footing Detail (ASTM/CSA)

FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete.

Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).

GroundZero® posts are footed 12 in. (305 mm) deeper than the regular support posts, and will be marked as such on the master footing diagram.

- Component footing depth equals 30 in. (762 mm) less the depth of the protective surfacing material. The post is designed to have 12" (305 mm) in concrete.

Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 18 in. (457 mm).

- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.

- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.

- Do not encase bottom of support post in concrete. Place post directly on packed stone.

- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.

For example:

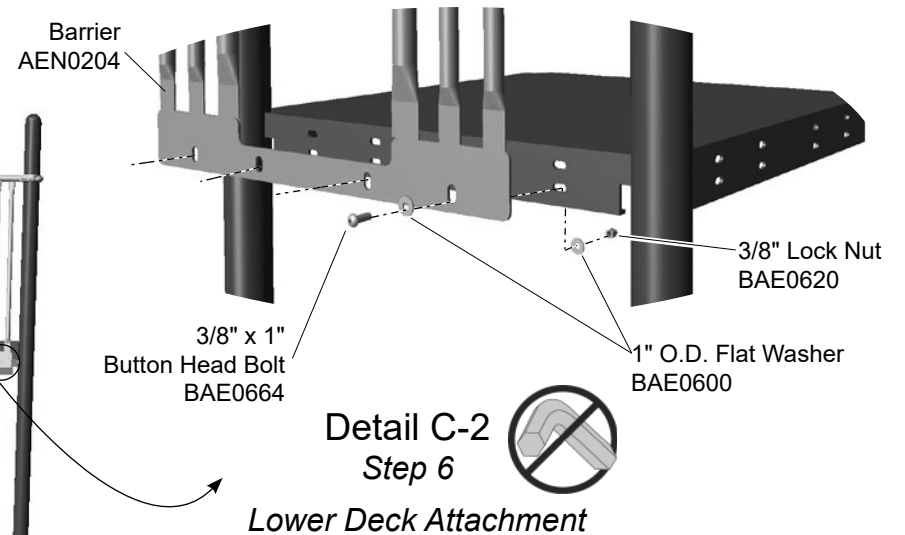
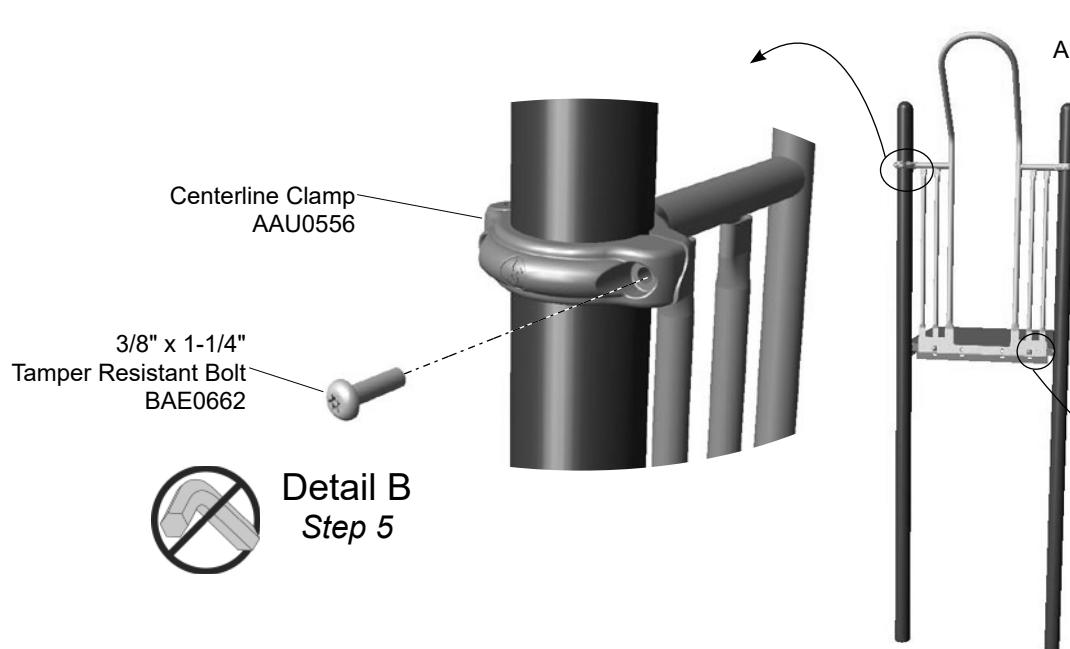
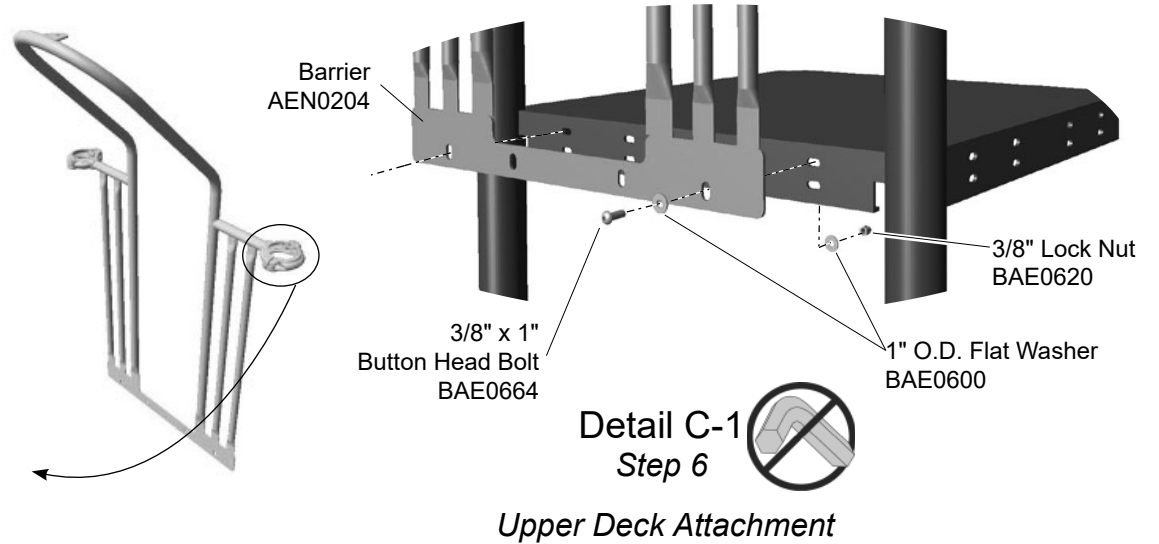
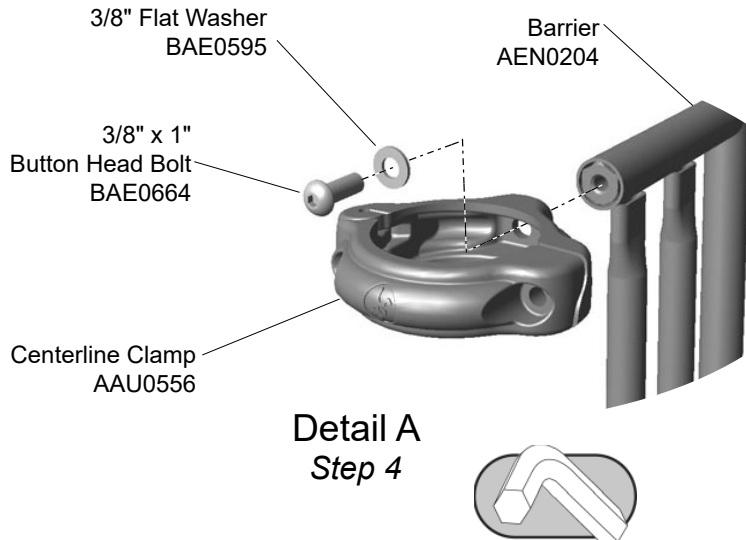
- If local soil is loose or unstable, a larger footing may be required.
- If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.

- Base of footing must be below frost line.

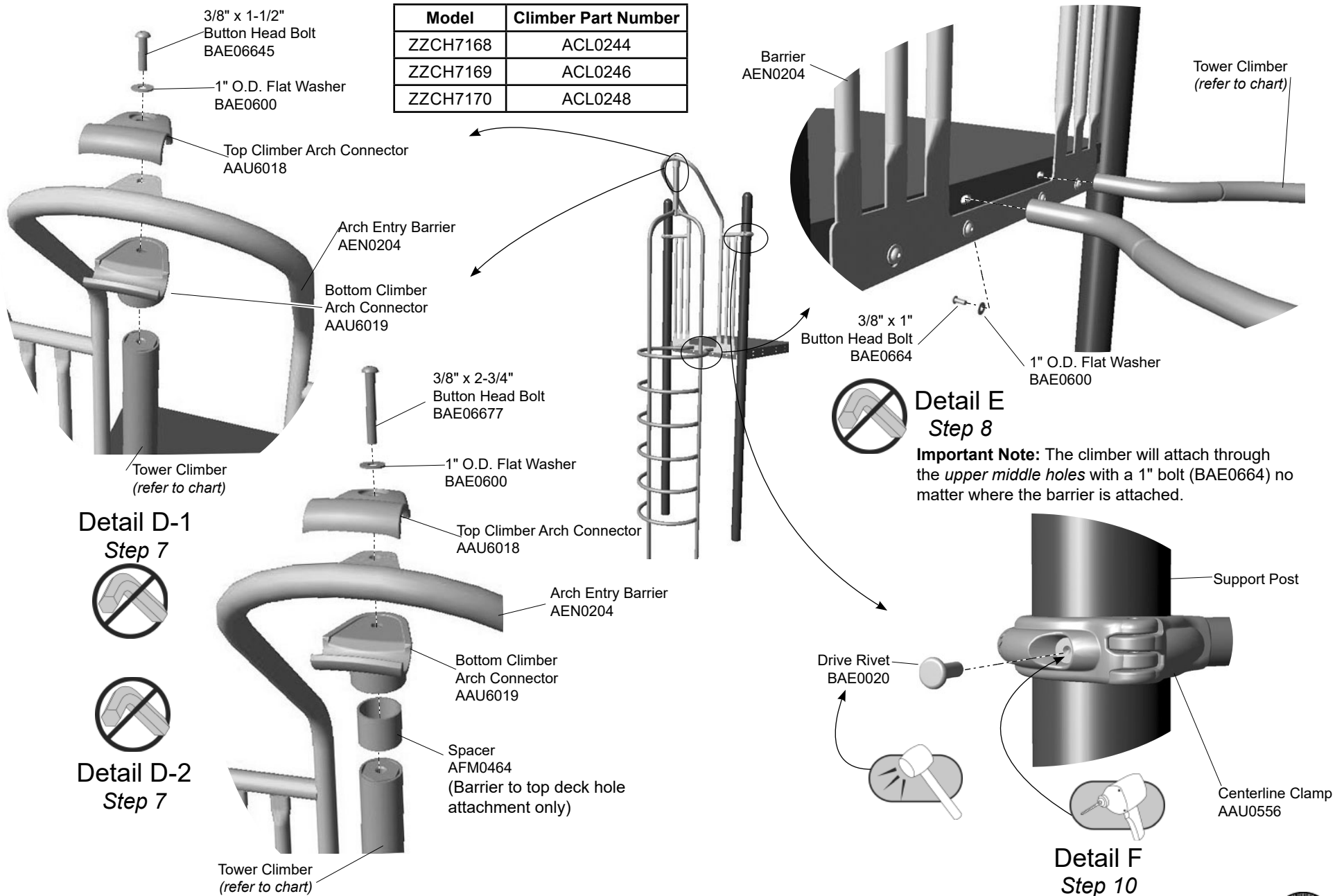
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 7.



Installation Instructions



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate footings as shown in the **Component Footing Details** in the *Challenger Guidelines* and on page 4 of this installation document.

Attach the clamps to the arch entry barrier.

Step 4: Attach the clamps to the barrier. See **Detail A**. Select the arch entry barrier, centerline clamps, and the appropriate hardware. There are (2) two connections. Position the neck of each clamp against an end of the barrier top rail and align holes. Attach as shown. Turn the clamp so that the hinge faces away from the entry, and fully tighten bolt.

Attach the clamps to the support posts.

Step 5: Attach the clamps to the posts. See **Detail B**. Select the appropriate hardware. There are (2) two connections. Lift the barrier into position against deck and close the clamps around the posts. Insert and thread each bolt into a clamp. Leave the clamp connection loose for deck connection adjustments.

Attach the barrier to the deck.

Step 6: Attach the barrier to the deck. See **Detail C-1 or Detail C-2**. Select the appropriate hardware. The barrier can be attached to either the *upper* or *lower* deck holes to avoid conflicts with adjacent clamps. Follow the appropriate direction.

Upper deck attachment: If the barrier attaches to the upper deck holes, there are (2) two connections. See **Detail C-1**. *Attach only the outside holes*. Attach as shown.

Lower deck attachment: If the barrier attaches to the lower deck holes, there are (4) four connections. See **Detail C-2**. *Connect through all four holes*. Attach as shown.

Note: The upper or lower deck attachment will effect connections in **Step 7**.

Attach the climber to the barrier.

Step 7: Attach the climber to the top of the barrier. See **Details D-1 and D-2**. Select the climber, the top and bottom climber connectors, the spacer, and the appropriate hardware. There is (1) one connection. Place the climber into the excavated footing. Align the climber with the holes in the barrier. If the barrier is mounted to the lower deck holes, *do not use the spacer*. Refer to **Detail D-1**. If the barrier is mounted in the *upper* set of deck holes, *use the spacer as shown*. Refer to **Detail D-2**. Do not fully tighten the connection.

Step 8: Attach the climber to the barrier/deck. See **Detail E**. Select the appropriate hardware. There are (2) two connections. Align the climber with the *upper* holes in the barrier. Attach as shown.

Important Note: The climber will attach through the *upper middle holes* with a 1" bolt (BAE0664) no matter where the barrier is attached in **step 6**.

Final Details.

Step 9: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 10: Install drive rivets. See **Detail F**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

CH7168 - 6 ft. (1829 mm) TOWER CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
AAU6018	CONNECTOR - CLIMBER ARCH TOP	1
AAU6019	CONNECTOR - CLIMBER ARCH BOTTOM	1
ACL0244	CLIMBER - 6' TOWER	1
AEN0204	BARRIER - ARCH ENTRY 66-15/32" x 30-1/2"	1
AFM0464	CUT TUBING - 1.90" O.D. x 1.50"	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	11
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - SS	1

CH7170 - 8 ft. (2438 mm) TOWER CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
AAU6018	CONNECTOR - CLIMBER ARCH TOP	1
AAU6019	CONNECTOR - CLIMBER ARCH BOTTOM	1
ACL0248	CLIMBER - 8' TOWER	1
AEN0204	BARRIER - ARCH ENTRY 66-15/32" x 30-1/2"	1
AFM0464	CUT TUBING - 1.90" O.D. x 1.50"	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	11
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - SS	1

CH7169 - 7 ft. (2134 mm) TOWER CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
AAU6018	CONNECTOR - CLIMBER ARCH TOP	1
AAU6019	CONNECTOR - CLIMBER ARCH BOTTOM	1
ACL0246	CLIMBER - 7' TOWER	1
AEN0204	BARRIER - ARCH ENTRY 66-15/32" x 30-1/2"	1
AFM0464	CUT TUBING -1.90" O.D. x 1.50"	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	11
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TMPR RESISTANT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	1
BAE06677	BOLT - 3/8"-16 x 2-3/4" BUTTON HEAD - SS	1





Assembly View (representative model)

Installation Instructions


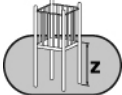

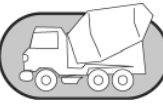
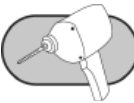


Challengers®

Models CH7217, CH7218 and CH7219
 36 in. (914 mm), 48 in. (1219 mm)
 and 60 in. (1524 mm) Rope Ascension

Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time: 3 man-hours
 Concrete Required: 0.18 cubic yard (0,15 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 5-12, EN: 6-14

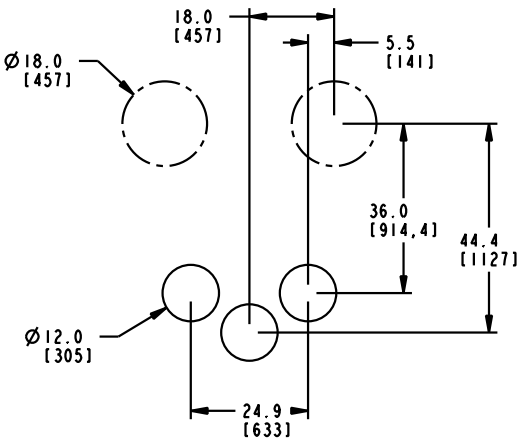
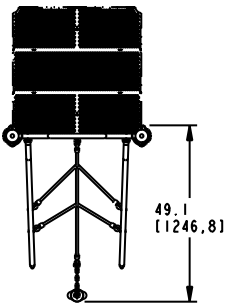
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

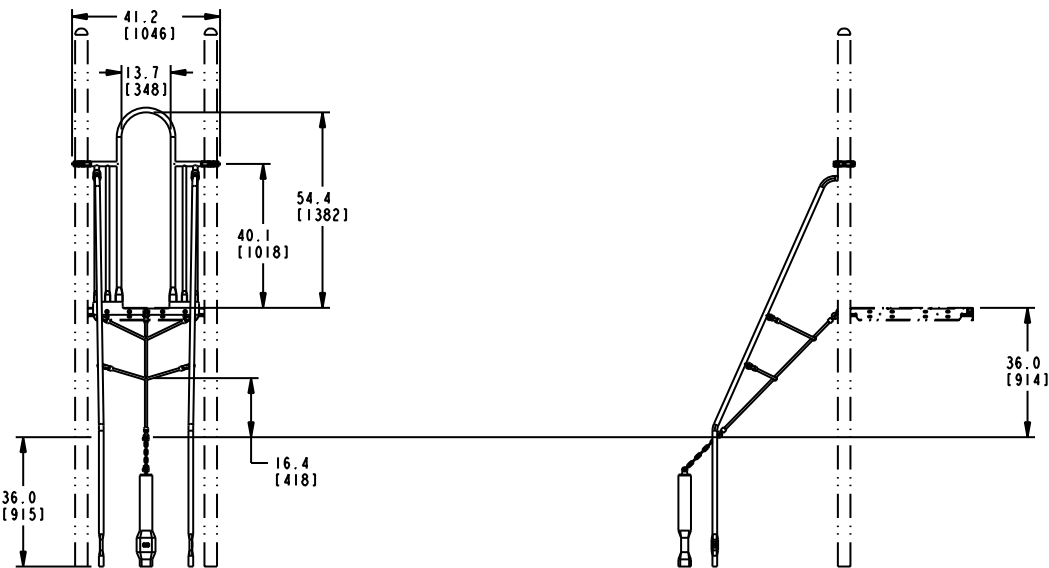
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

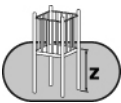
Top View



Footing Diagram



Elevation Views
CH7217



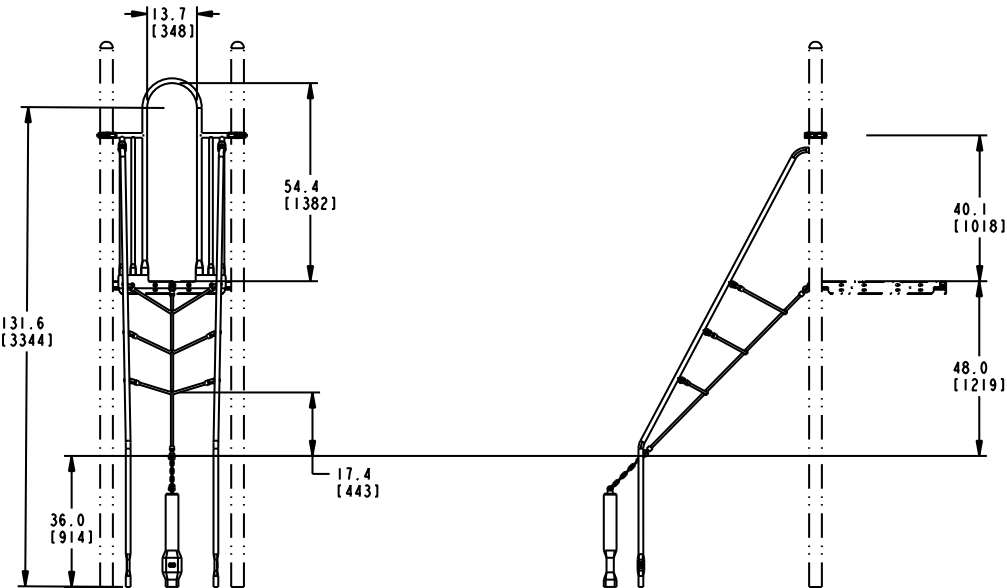
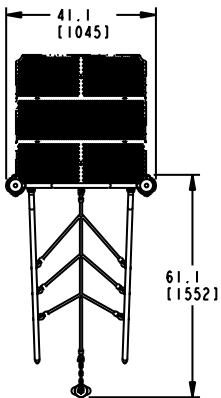
ASTM F1487: 36" (914 mm)
CSA-Z614: 914 mm
EN1176: 914 mm



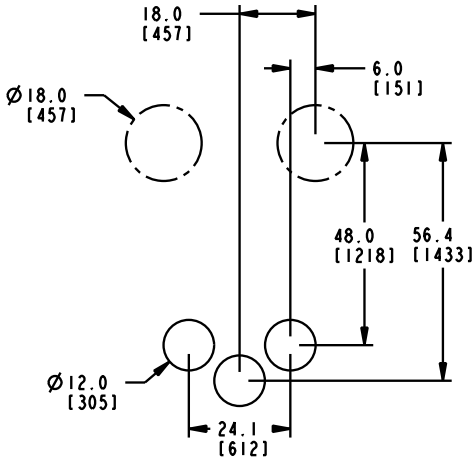
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

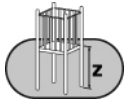
Top View



Elevation Views
CH7218



Footing Diagram



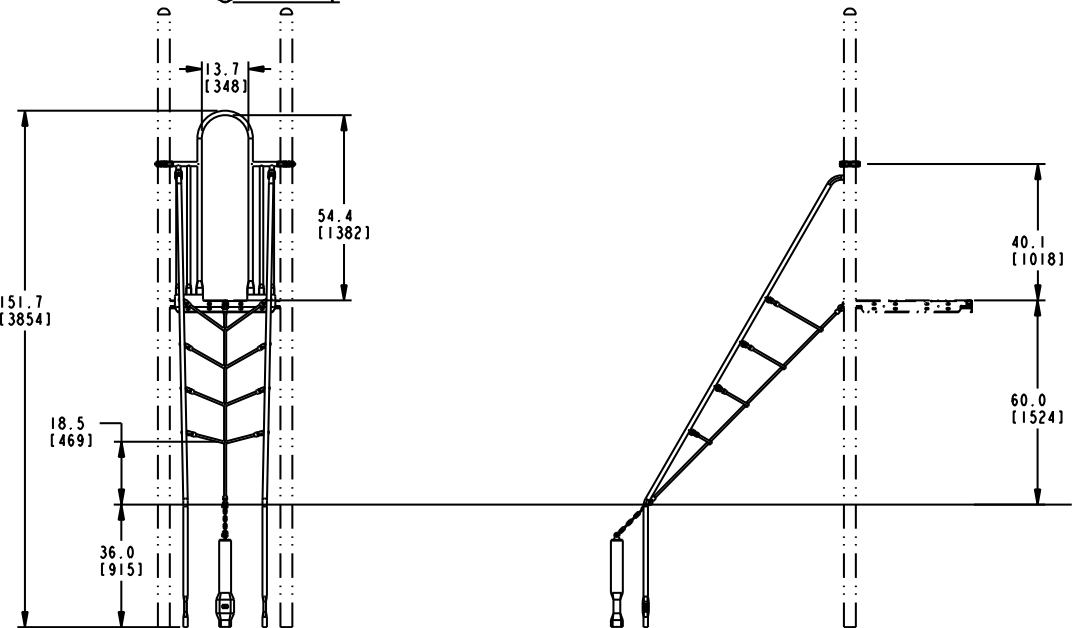
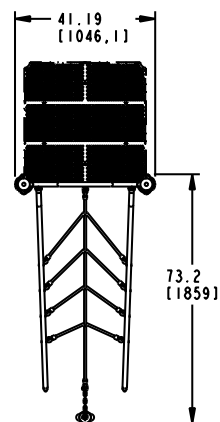
ASTM F1487: 48" (1219 mm)
CSA-Z614: 1219 mm
EN1176: 1219 mm



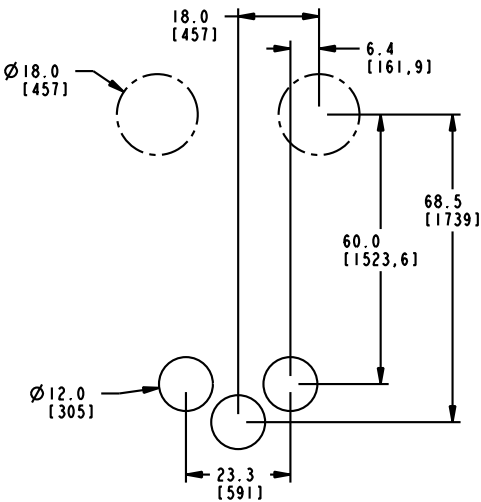
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

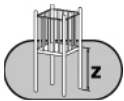
Top View



Elevation Views
CH7219



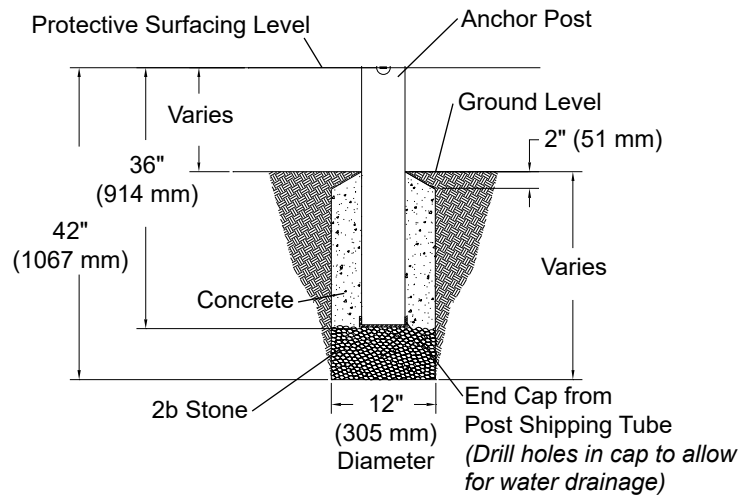
Footing Diagram



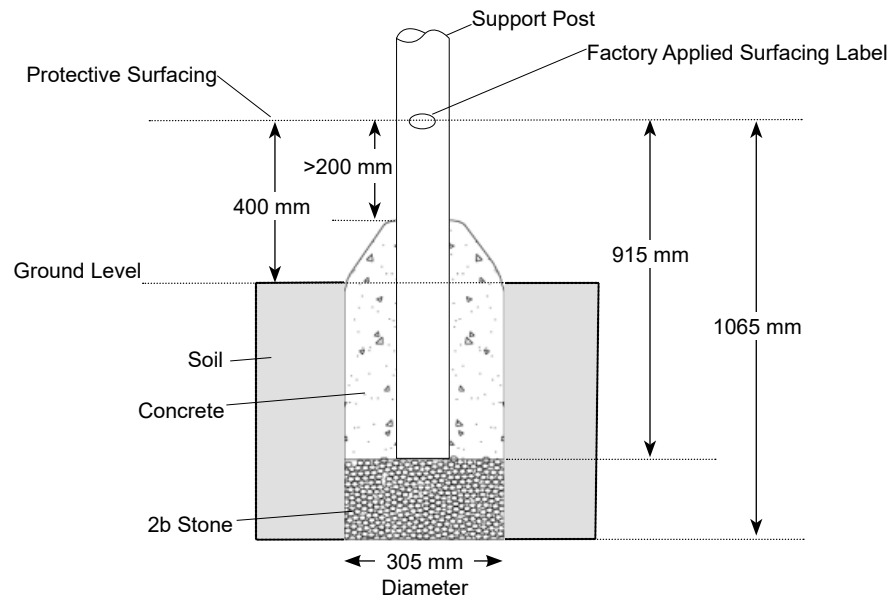
ASTM F1487: 60" (1524 mm)
CSA-Z614: 1524 mm
EN1176: 1524 mm



Installation Instructions



Anchor Post Footing Detail (ASTM/CSA)



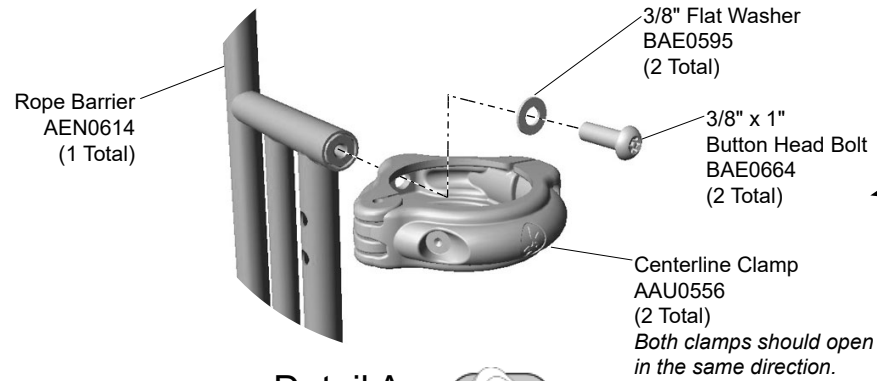
Footing Detail Anchor Post (EN)

FOOTING NOTES

- Anchor post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete.
Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone or porous block.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

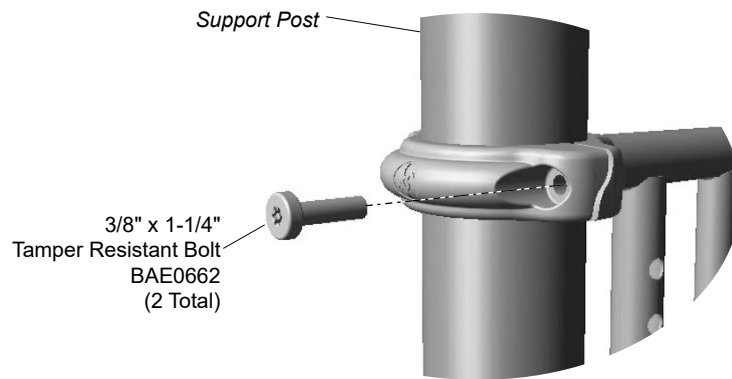
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 12.



Detail A
Step 4

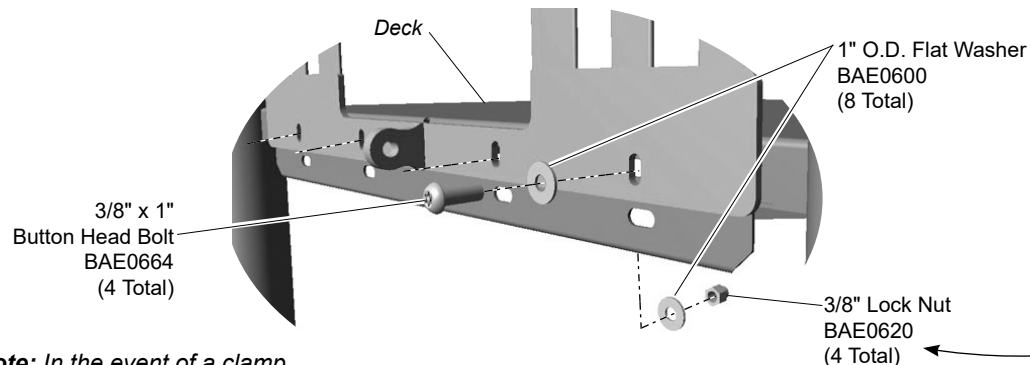
Attach the clamps to the rope barrier.



Detail B
Step 5

Attach the rope barrier to the support posts.

Installation Instructions



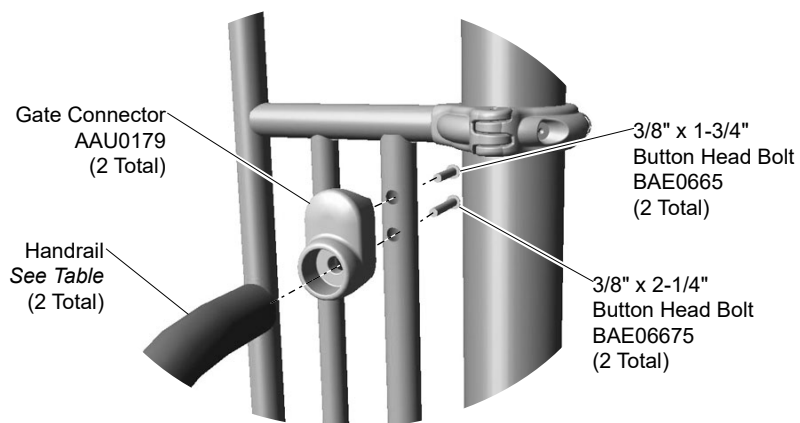
Note: In the event of a clamp conflict the barrier may be attached to the bottom holes in the deck.



Detail C Step 6

Attach the rope barrier to the deck.

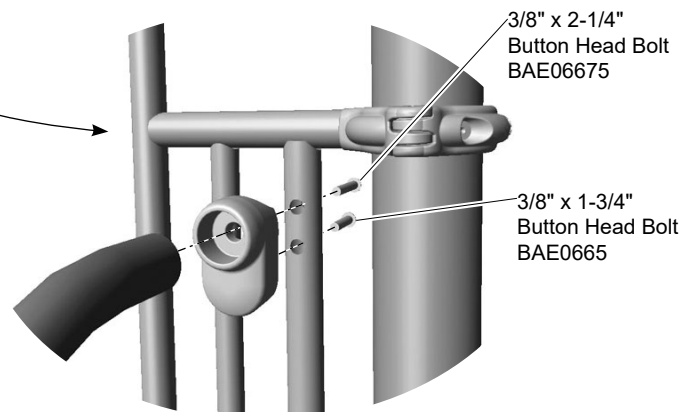
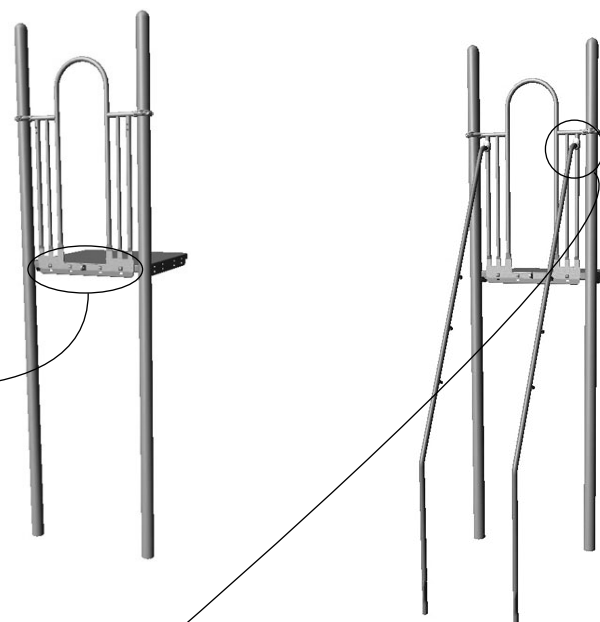
Model	Deck Height	Handrail Part Number
CH7217	36 in. (914 mm)	AFR1615
CH7218	48 in. (1219 mm)	AFR1616
CH7219	60 in. (1524 mm)	AFR1617



Detail D-1 - Rope barrier attached to the upper holes in the deck.

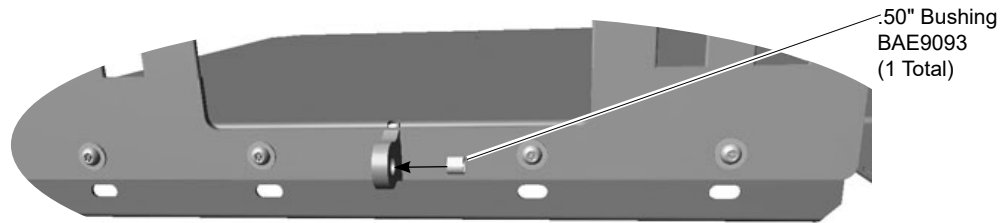
Details D-1 and D-2 Step 7

Attach the handrails to the rope barrier.

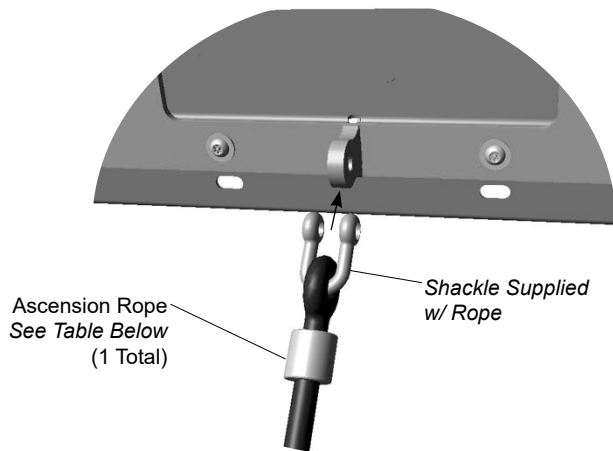


Detail D-2 - Rope barrier attached to the lower holes in the deck.

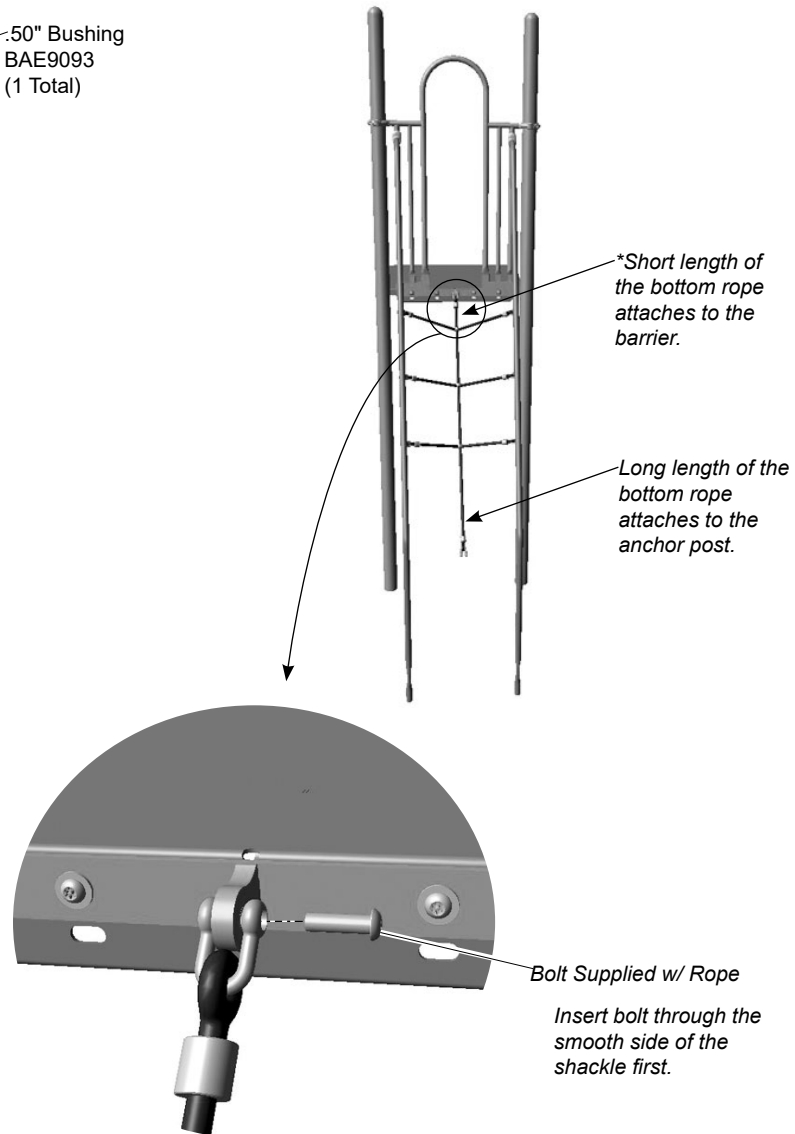
Installation Instructions



Detail E-1 - Insert the bushing into the rope barrier mounting tab.



Detail E-2 - Place the shackle on the *short length of the bottom rope over the rope barrier mounting tab.



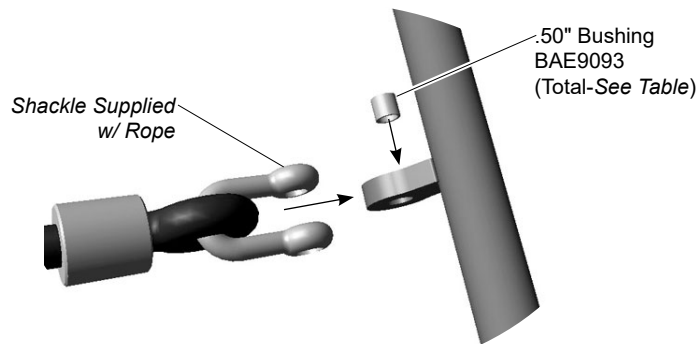
Detail E-3 - Attach the rope to the rope barrier mounting tab.

Details E-1, E-2 and E-3 Step 8

Attach the rope to the rope barrier.

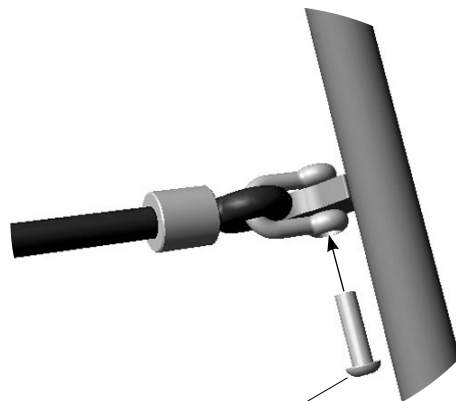
Model	Deck Height	Rope Part Number
CH7217	36 in. (914 mm)	AMC0651
CH7218	48 in. (1219 mm)	AMC0653
CH7219	60 in. (1524 mm)	AMC0655

Installation Instructions



Detail F-1 - Insert a bushing into each mounting tab on the handrails and then place a rope shackle over each tab.

Model	Rope Part Number	Number of Bushings
CH7217	AMC0651	4
CH7218	AMC0653	6
CH7219	AMC0655	8



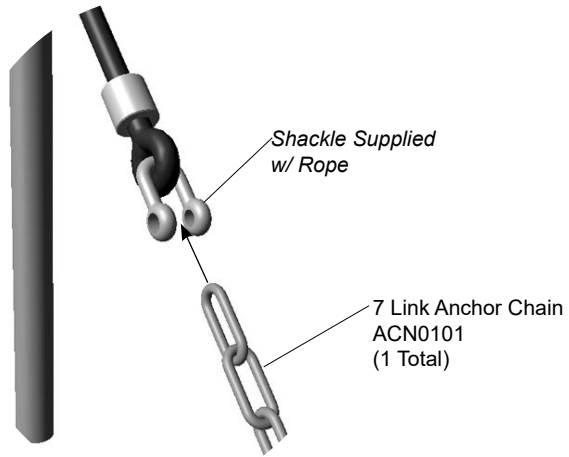
Detail F-2 - Attach the rope to the handrail mounting tab.



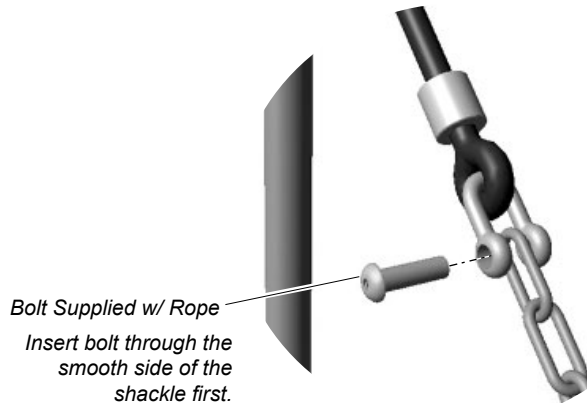
Details F-1 and F-2
Step 9
Attach the rope to the handrails.



Installation Instructions



Detail G-1 - Insert the last link on one end of the chain between the rope shackle.



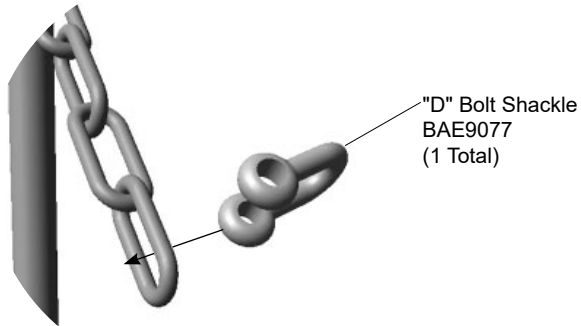
Detail G-2 - Attach the chain to the rope shackle.

Details G-1 and G-2
Step 10

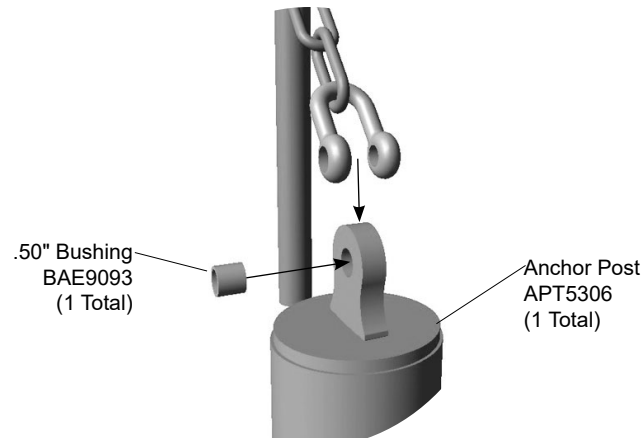
Attach the anchor chain to the rope.



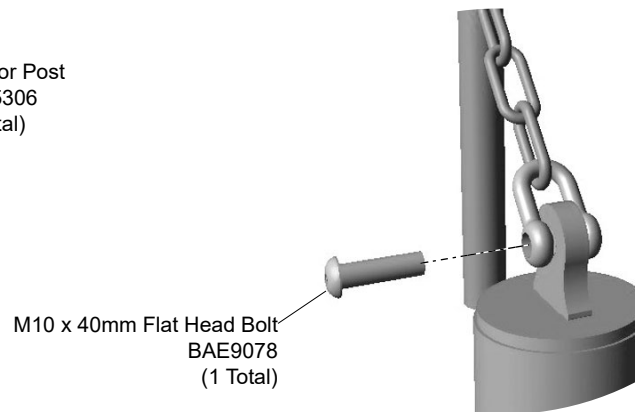
Installation Instructions



Detail H-1 - Insert a bolt shackle through the last link on the other end of the chain.



Detail H-2 - Insert a bushing into the mounting tab on the anchor post.

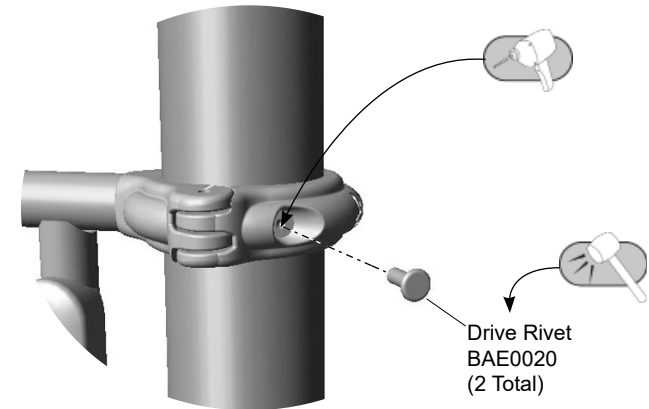


Detail H-3 - Attach the chain to the anchor post.

Details H-1, H-2 and H-3

Step 11

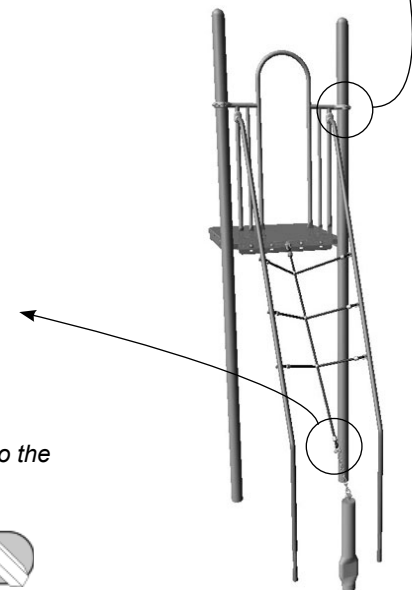
Attach the anchor chain to the anchor post.



Detail I

Step 13

Secure the clamps to the support posts.



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate the footings as shown in the **Anchor Post Footing Detail** on **page 5** of this document.

Step 4: Attach the clamps to the rope barrier. See **Detail A**. Position a clamp against each side of the barrier top rail and attach as shown. Ensure both clamps open in the same direction. Fully tighten the connections according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 5: Attach the rope barrier to the support posts. See **Detail B**. Position the barrier against the deck and close the clamps around the support post. Ensure the mounting tab on the bottom of the barrier is to the outside, and attach as shown.

Step 6: Attach the rope barrier to the deck. See **Detail C**. Align the holes in the bottom of the barrier with the deck holes and attach as shown.

Note: In the event of a clamp conflict the barrier may be attached to the bottom holes in the deck.

Step 7: Attach the handrails to the rope barrier. See **Details D-1 and D-2**. Place the handrails in their footings and against the barrier, and attach as shown.

Step 8: Attach the rope to the rope barrier. See **Details E-1, E-2 and E-3**. Insert a bushing into the rope barrier mounting tab and place the shackle on the short length of the Ascension bottom rope over the tab, and attach as shown. Fully tighten the connection.

Step 9: Attach the rope to the handrails. See **Details F-1 and F-2**. Insert a bushing into each mounting tab on the handrails and then place a rope shackle over each tab, and attach as shown. Fully tighten the connection.

Step 10: Attach the anchor chain to the rope. See **Details G-1 and G-2**. Insert the last link on one end of the chain between the rope shackle, and attach as shown. Fully tighten the connection.

Step 11: Attach the anchor chain to the anchor post. See **Details H-1, H-2 and H-3**. Insert a bolt shackle through the last link on the other end of the chain. Insert a bushing into the mounting tab on the anchor post and place the shackle over the tab. Attach as shown. Fully tighten the connection.

Final Details.

Step 12: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 13: Install drive rivets. See **Detail I**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Bill of Materials

CH7217 - 36 in. (914 mm) ROPE ASCENSION

PART NO.	DESCRIPTION	QTY.
AAU0179	CONNECTOR - 1.315" O.D. GATE ADAPTOR	2
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
ACN0101	CHAIN - 5/0 SILVER SHIELD CHAIN - 7 LINKS	1
AEN0614	BARRIER - 30.50" x 57.67" - ROPE	1
AFR1615	HANDRAIL - 108.73" x 35.92" x 1.32"	2
AMC0651	ROPE - 36" ROPE ASCENSION - (CH)	1
APT5306	POST - ROPE CLIMBER GROUND TO DECK	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	2
BAE06675	BOLT - 3/8"-16 x 2-1/4" BUTTON HEAD - SS	2
BAE9077	"D" STYLE SHACKLE	1
BAE9078	BOLT - M10 x 1.5 x 40mm FLAT HEAD	1
BAE9093	BUSHING - .399" I.D. x .56" O.D. x .50"	6

CH7218 - 48 in. (1219 mm) ROPE ASCENSION

PART NO.	DESCRIPTION	QTY.
AAU0179	CONNECTOR - 1.315" O.D. GATE ADAPTOR	2
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
ACN0101	CHAIN - 5/0 SILVER SHIELD CHAIN - 7 LINKS	1
AEN0614	BARRIER - 30.50" x 57.67" - ROPE	1
AFR1616	HANDRAIL - 120.71" x 47.92" x 1.32"	2
AMC0653	ROPE - 48" ROPE ASCENSION - (CH)	1
APT5306	POST - ROPE CLIMBER GROUND TO DECK	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	2
BAE06675	BOLT - 3/8"-16 x 2-1/4" BUTTON HEAD - SS	2
BAE9077	"D" STYLE SHACKLE	1
BAE9078	BOLT - M10 x 1.5 x 40mm FLAT HEAD	1
BAE9093	BUSHING - .399" I.D. x .56" O.D. x .50"	8

CH7219 - 60 in. (1524 mm) ROPE ASCENSION

PART NO.	DESCRIPTION	QTY.
AAU0179	CONNECTOR - 1.315" O.D. GATE ADAPTOR	2
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
ACN0101	CHAIN - 5/0 SILVER SHIELD CHAIN - 7 LINKS	1
AEN0614	BARRIER - 30.50" x 57.67" - ROPE	1
AFR1617	HANDRAIL - 132.73" x 59.92" x 1.32"	2
AMC0655	ROPE - 60" ROPE ASCENSION - (CH)	1
APT5306	POST - ROPE CLIMBER GROUND TO DECK	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	6
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	2
BAE06675	BOLT - 3/8"-16 x 2-1/4" BUTTON HEAD - SS	2
BAE9077	"D" STYLE SHACKLE	1
BAE9078	BOLT - M10 x 1.5 x 40mm FLAT HEAD	1
BAE9093	BUSHING - .399" I.D. x .56" O.D. x .50"	10





Assembly View (representative model)

Model	Deck Height
ZZCH7948	24" (610 mm)
ZZCH7949	36" (915 mm)
ZZCH7950	48" (1220 mm)
ZZCH7956	60" (1525 mm)
ZZCH7957	72" (1830 mm)

Installation Instructions


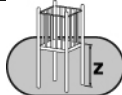

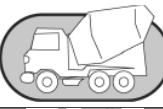
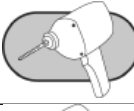

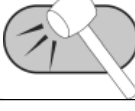
Challengers® Models CH7948, CH7949,
CH7950, CH7956, and CH7957
Silo Climber

24 in (610 mm), 36 in (914 mm), 48 in (1219 mm),
60 in (1524 mm), 72 in (1829 mm) Deck

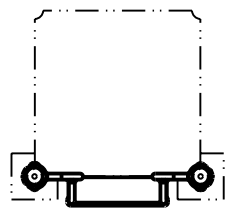
Installation Preparation

Recommended Crew: Two (2) adults
Installation Time: 2 man-hours
Concrete Required: 0.06 cubic yard (0,04 cubic meters)
Use Zone: Refer to Master Drawing
User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

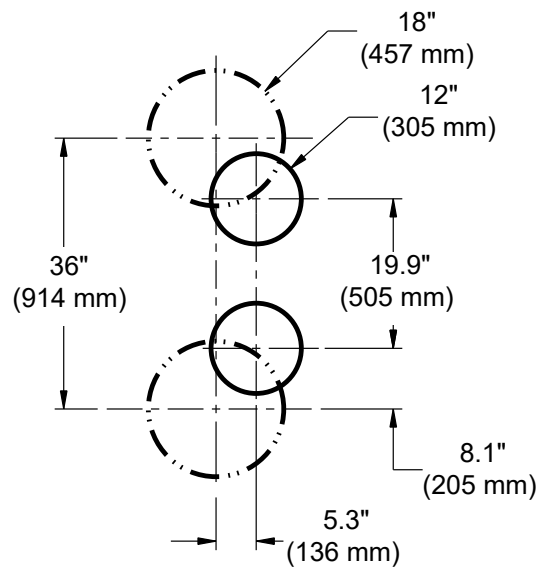
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

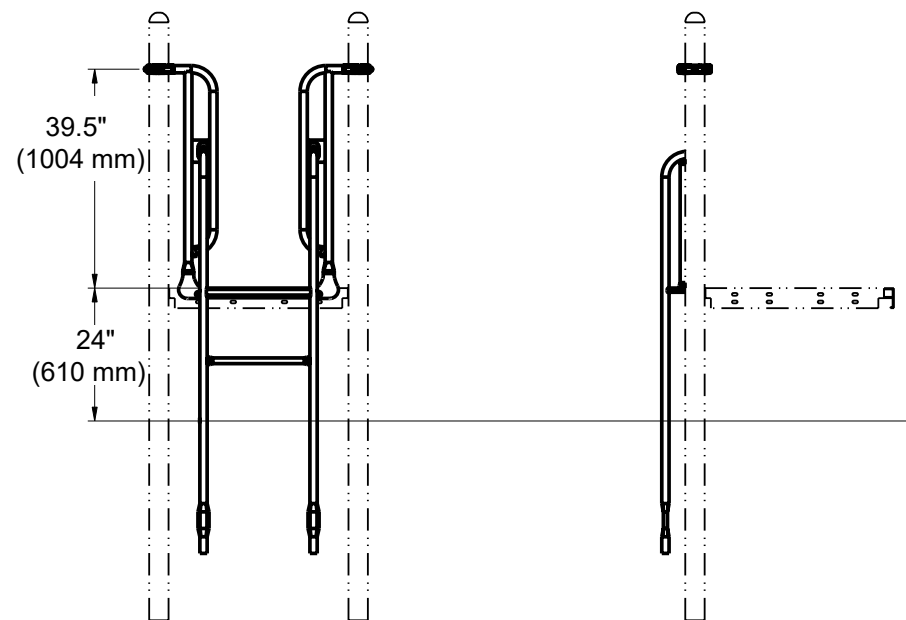
Installation Instructions



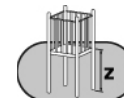
Top View
(All Models)



Footing Diagram
(All Models)



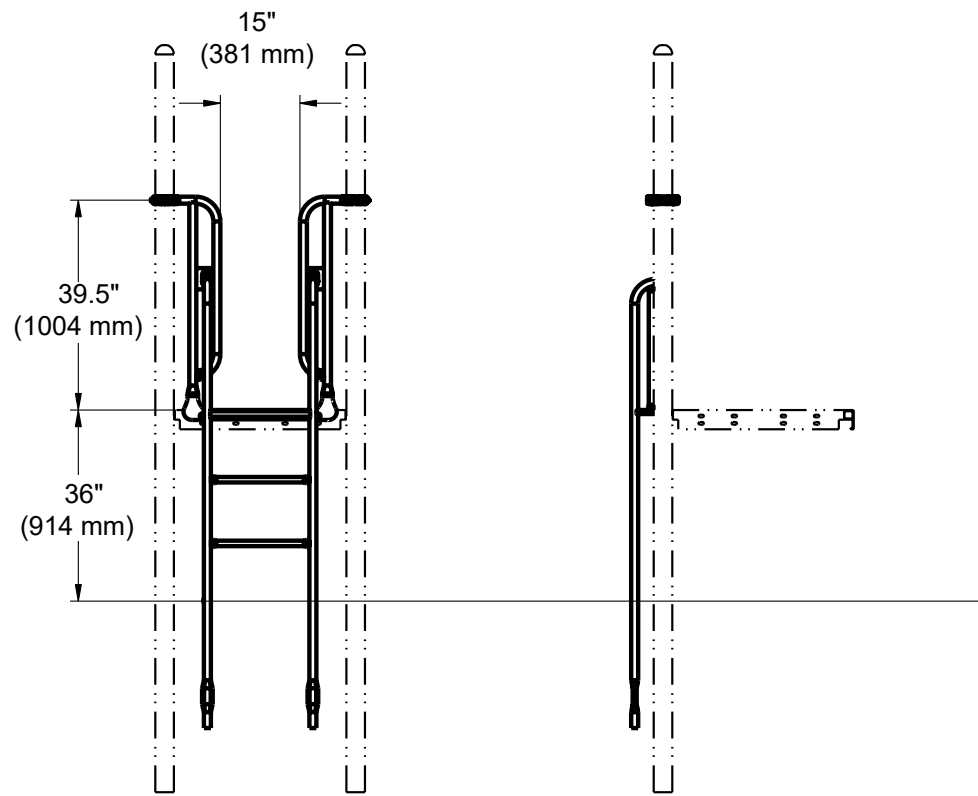
Elevation Views
CH7948



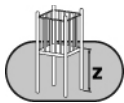
ASTM F1487: 24" (610 mm)
CSA-Z614: 610 mm
EN1176: 610 mm



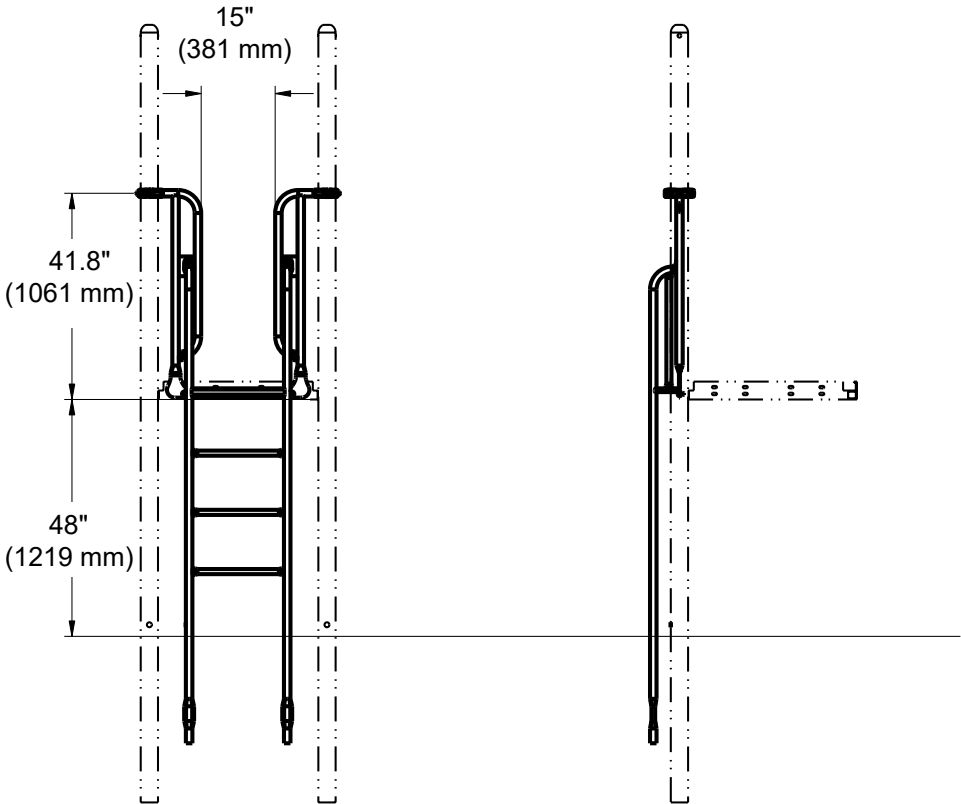
Installation Instructions



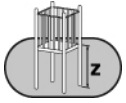
Elevation Views
CH7949



ASTM F1487: 36" (914 mm)
CSA-Z614: 914 mm
EN1176: 914 mm



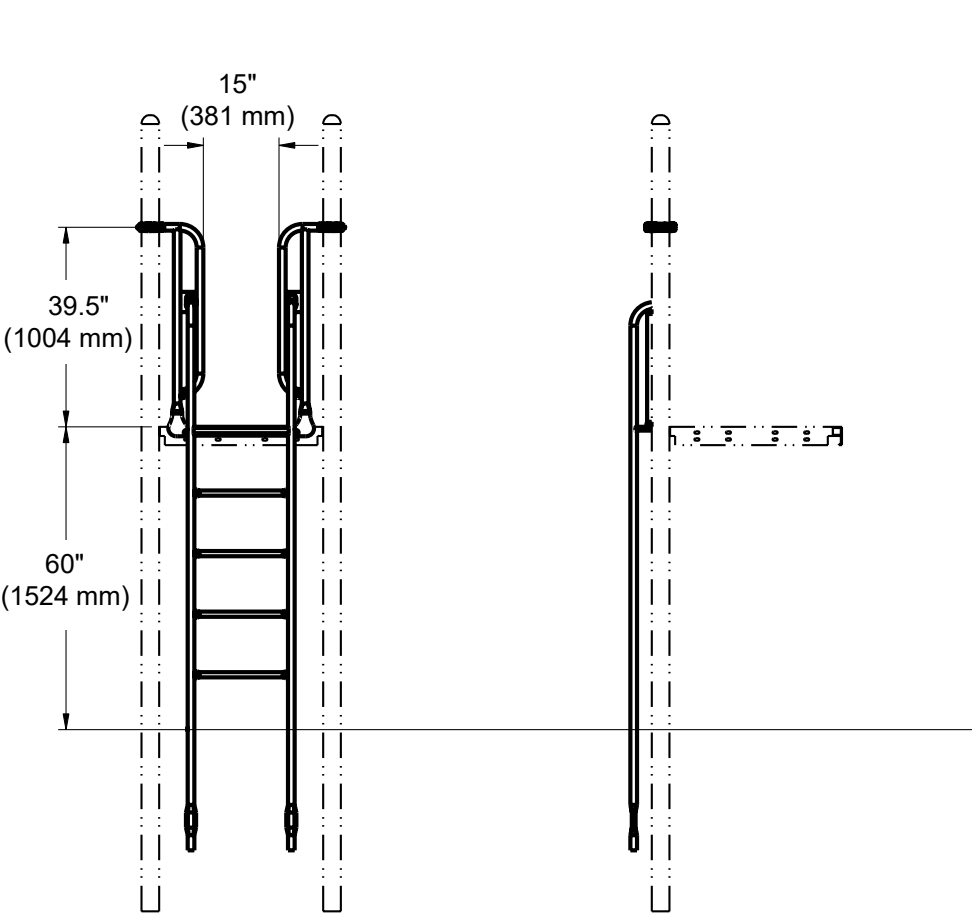
Elevation Views
CH7950



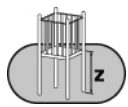
ASTM F1487: 48" (1219 mm)
CSA-Z614: 1219 mm
EN1176: 1219 mm



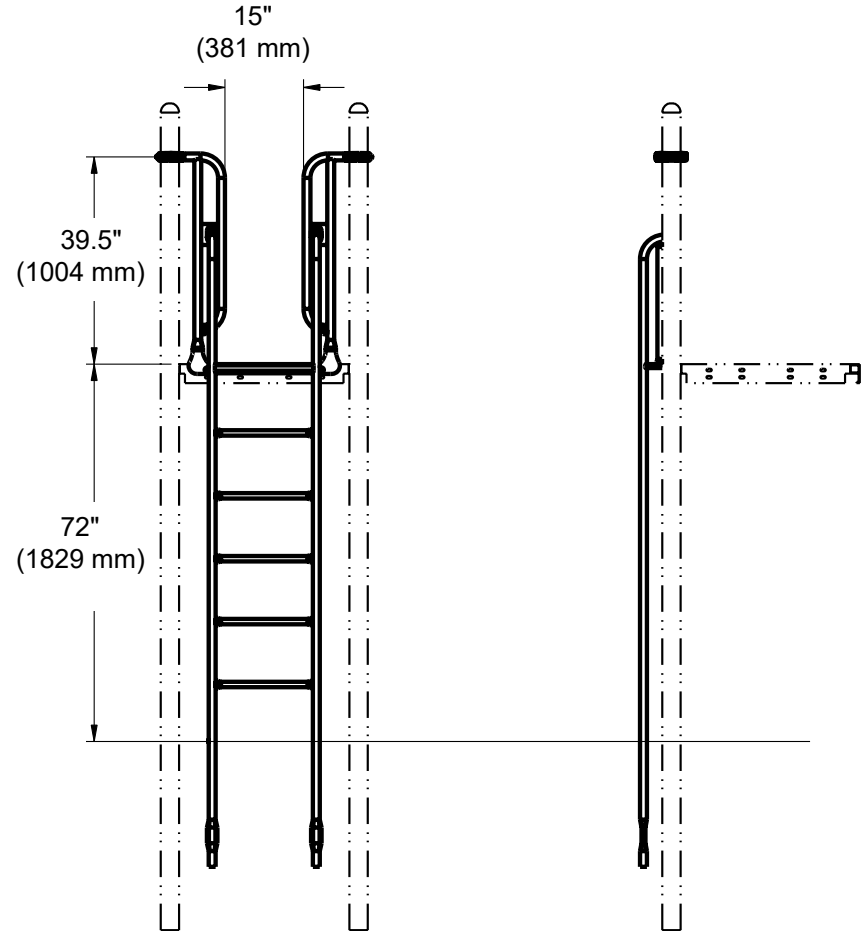
Installation Instructions



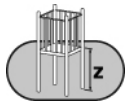
Elevation Views
CH7956



ASTM F1487: 60" (1524 mm)
CSA-Z614: 1524 mm
EN1176: 1524 mm



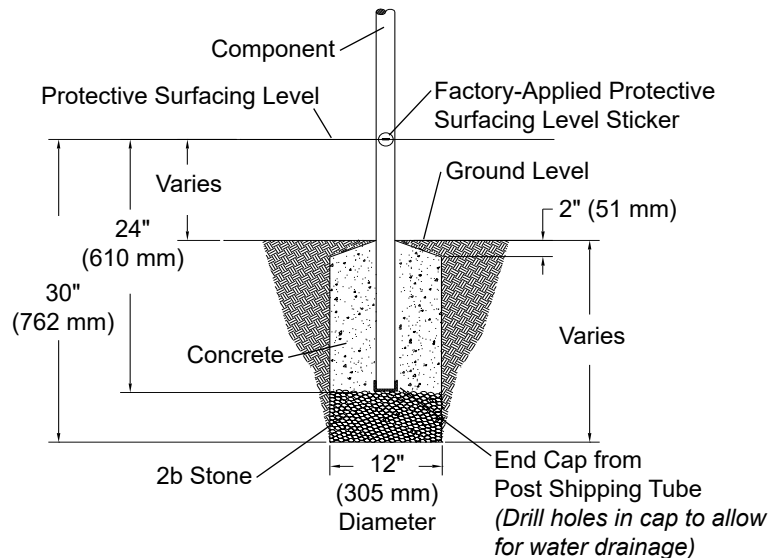
Elevation Views
CH7957



ASTM F1487: 72" (1829 mm)
CSA-Z614: 1829 mm
EN1176: 1829 mm



Installation Instructions



Component Footing Detail (ASTM/CSA)

FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete.

Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).

GroundZero® posts are footed 12 in. (305 mm) deeper than the regular support posts, and will be marked as such on the master footing diagram.

- Component footing depth equals 30 in. (762 mm) less the depth of the protective surfacing material. The post is designed to have 12" (305 mm) in concrete.

Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 18 in. (457 mm).

- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.

- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.

- Do not encase bottom of support post in concrete. Place post directly on packed stone.

- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.

For example:

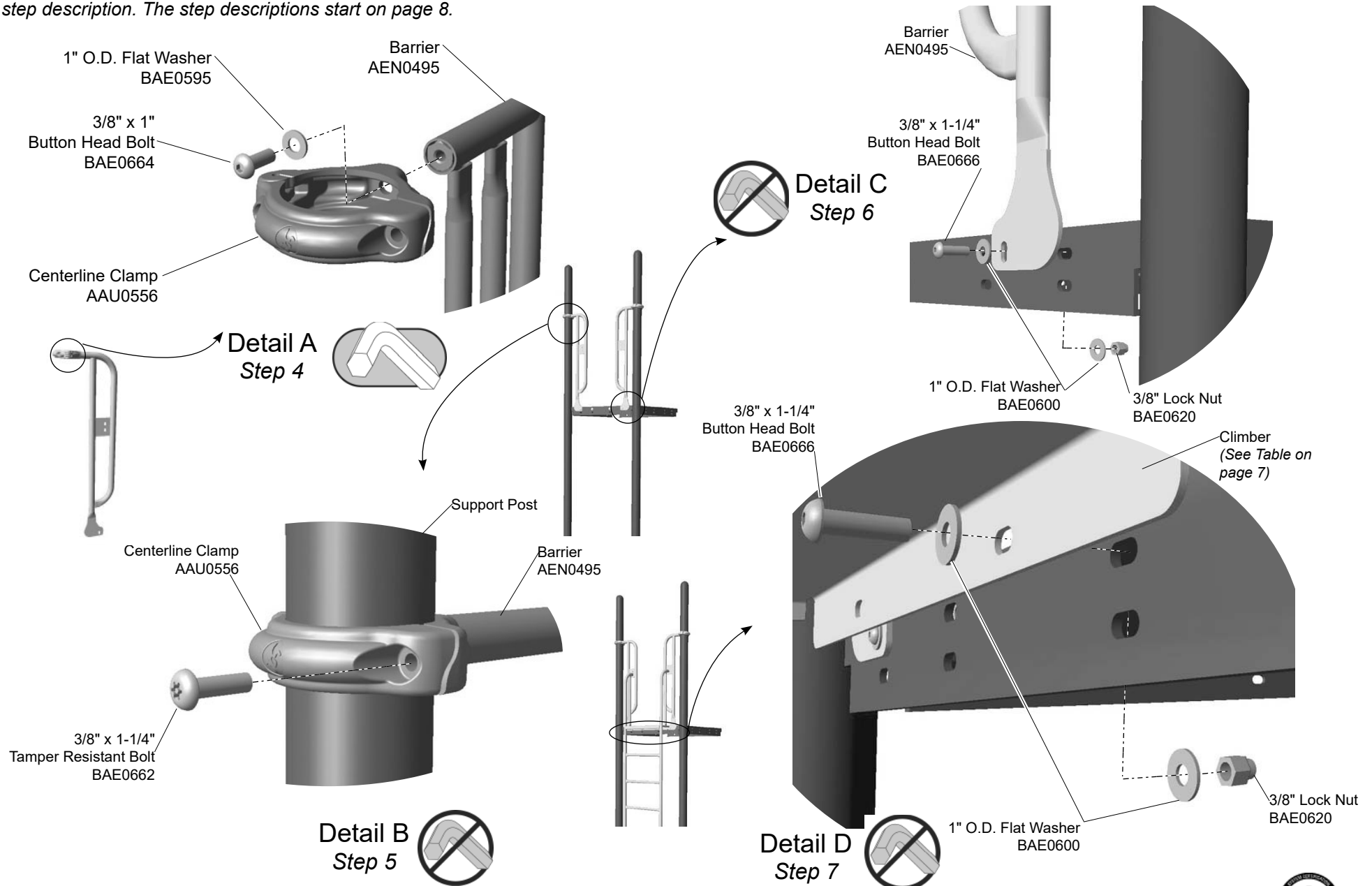
- If local soil is loose or unstable, a larger footing may be required.
- If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.

- Base of footing must be below frost line.

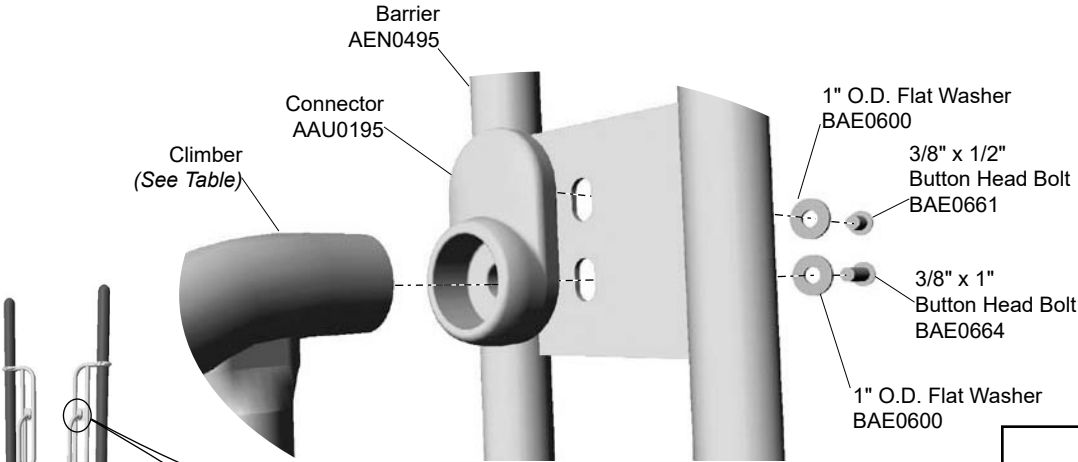
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 8.

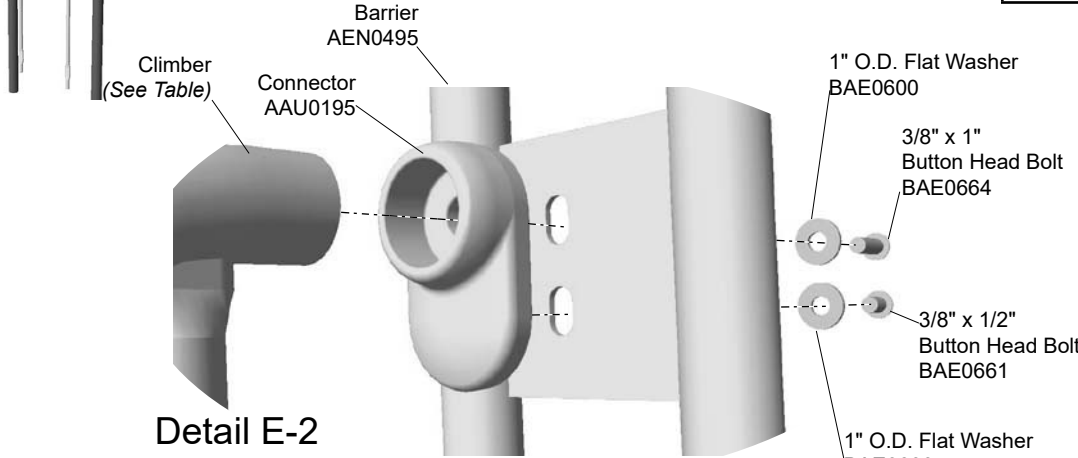


Installation Instructions



Detail E-1
Step 8
Gates attached to upper deck holes

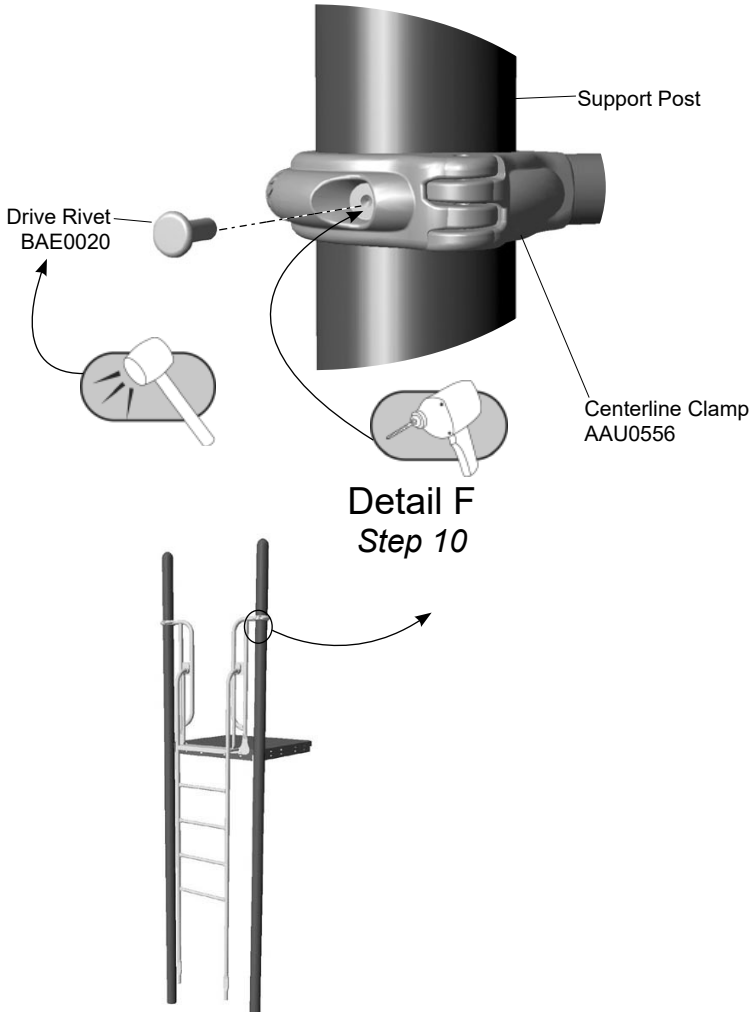
Model	Part Number	Deck Height
ZZCH7948	ACL0219	24" (610 mm)
ZZCH7949	ACL0220	36" (915 mm)
ZZCH7950	ACL0222	48" (1220 mm)
ZZCH7956	ACL0224	60" (1525 mm)
ZZCH7957	ACL0226	72" (1830 mm)



Detail E-2
Step 8
Gates attached to lower deck holes



Installation Instructions



Installation Instructions

__Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

__Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

__Step 2: Separate and identify all components and hardware.

__Step 3: Excavate footings as shown in the **Component Footing Details** in the Guidelines and on page 5 of this installation document.

Attach the clamps to the barrier gates.

__Step 4: Attach the clamps to the barrier gates. See **Detail A**. Select both barrier gates and (2) two clamps, and the appropriate hardware. Position the top of each barrier against the neck of the clamp and make the connection as shown. Fully tighten connections.

Attach the clamps to the support posts.

__Step 5: Attach the clamps to the support posts. See **Detail B**. Select (2) two 3/8" x 1-1/4" tamper resistant bolts. Lift each barrier gate into position against the deck and attach each clamp to the support post as shown. Leave the connections loose. The location of the clamp may need to be changed.

Attach the barrier gates to the deck.

__Step 6: Attach the barrier gates to the deck. See **Detail C**. Select the appropriate hardware. There are (2) two connections. Align the barrier gates with either the *top* or the *bottom* holes of the deck.

Note: The connectors are adjusted according the the barrier gate location. See **Detail E-1** and **Detail E-2**.

Attach the silo climber to the deck.

__Step 7: Attach the silo climber to the deck. See **Detail D**. Select the appropriate hardware. There are (2) two connections. Place the silo climber onto the prepared footings. Align the silo climber with the *top* deck holes.

Important Note: The top step plate of the silo climber **must** be flush with the top surface of the adjoining deck.

Attach the silo climber to the barrier gate.

__Step 8: Attach the silo climber to the barrier gate. See **Detail E-1** and **Detail E-2**. Select (2) two connectors and the appropriate hardware. There are (4) four connections. **Note:** The connectors are adjusted according the the barrier gate location.

Final Details.

__Step 9: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications. Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

__Step 10: Install drive rivets. See **Detail F**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

CH7948 - 24 in (610 mm) DECK SILO CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0195	CONNECTOR - 1.315" O.D. GATE	2
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
ACL0219	CLIMBER - 24" w/LABEL AT 24"	1
AEN0495	BARRIER - 42.07" x 7.75" GATE w/MOUNTING PLATE	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	12
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0661	BOLT - 3/8"-16 x 1/2" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RSTNT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4

CH7949 - 36 in (914 mm) DECK SILO CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0195	CONNECTOR - 1.315" O.D. GATE	2
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
ACL0220	CLIMBER - 36" w/LABEL AT 24"	1
AEN0495	BARRIER - 42.07" x 7.75" GATE w/MOUNTING PLATE	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	12
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0661	BOLT - 3/8"-16 x 1/2" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RSTNT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4

CH7950 - 48 in (1219 mm) DECK SILO CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0195	CONNECTOR - 1.315" O.D. GATE	2
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
ACL0222	CLIMBER - 48" w/LABEL AT 24"	1
AEN0495	BARRIER - 42.07" x 7.75" GATE w/MOUNTING PLATE	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	12
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0661	BOLT - 3/8"-16 x 1/2" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RSTNT w/TORX DR	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4

CH7956 - 60 in (1524 mm) DECK SILO CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0195	CONNECTOR - 1.315" O.D. GATE	2
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
ACL0224	CLIMBER - 60" w/LABEL AT 24"	1
AEN0495	BARRIER - 42.07" x 7.75" GATE w/MOUNTING PLATE	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	12
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0661	BOLT - 3/8"-16 x 1/2" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RSTNT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4

CH7957 - 72 in (1829 mm) DECK SILO CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0195	CONNECTOR - 1.315" O.D. GATE	2
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	2
ACL0226	CLIMBER - 72" w/LABEL AT 24"	1
AEN0495	BARRIER - 42.07" x 7.75" GATE w/MOUNTING PLATE	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	12
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	4
BAE0661	BOLT - 3/8"-16 x 1/2" BUTTON HEAD - SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TPR RSTNT w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4





Assembly View (representative model)

Installation Instructions

Challengers® Models CH8266, CH8266S,
CH8267 and CH8267S

Rushmore

48 in. (1219 mm) and 60 in. (1524 mm)

Single Flex Tread

In-Ground and Surface Mount

Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time (in-ground): 3 man-hours
 Installation Time (surface mount): 2 man-hours
 Concrete Required (in-ground): 0.06 cubic yard (0,04 cubic meters)
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 5-12, EN: 6-14

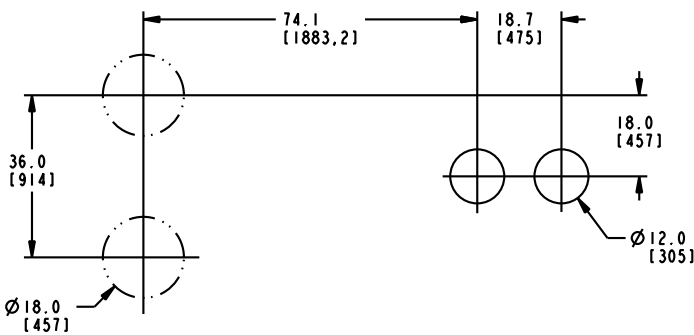
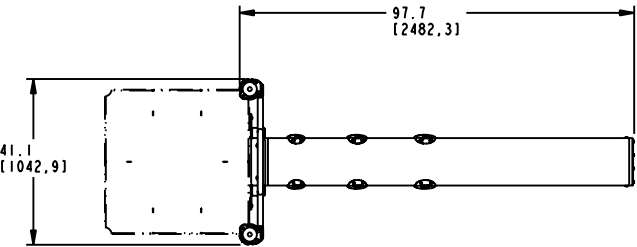
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

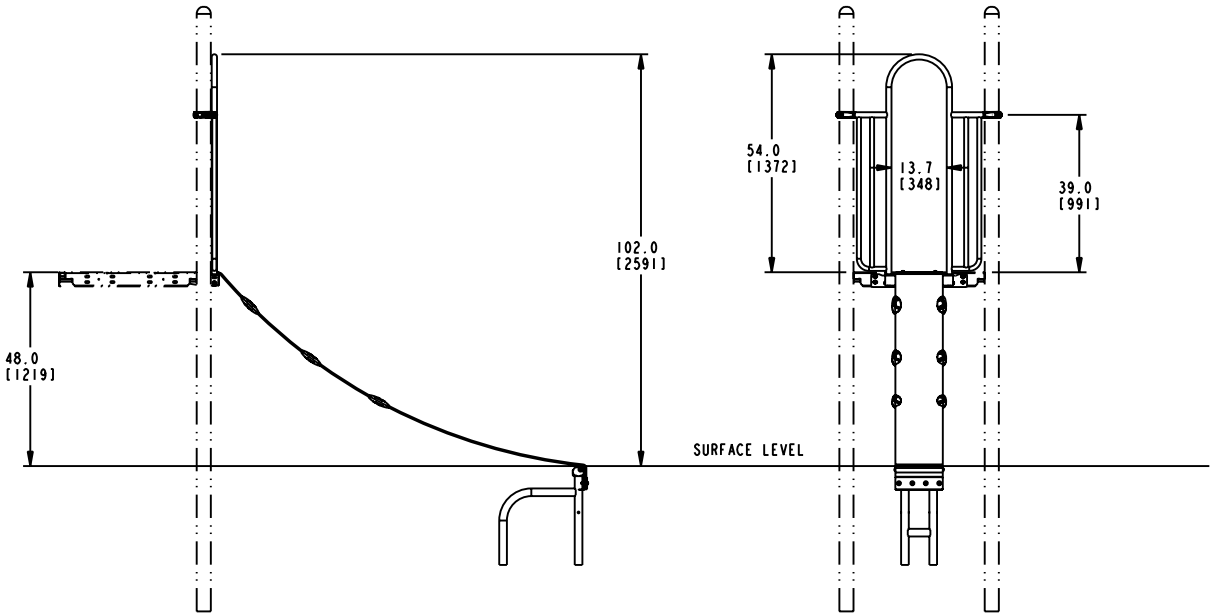
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

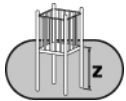
Top View



Footing Diagram



Elevation Views
CH8266

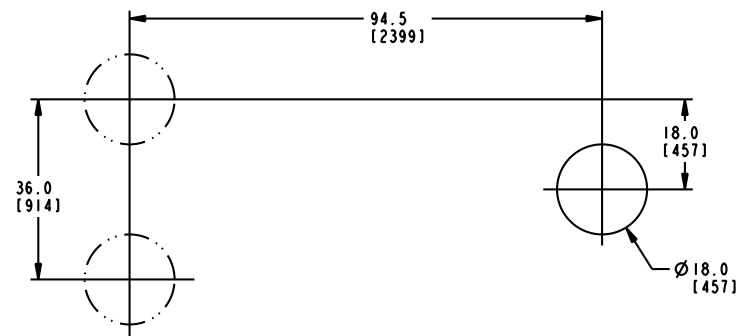
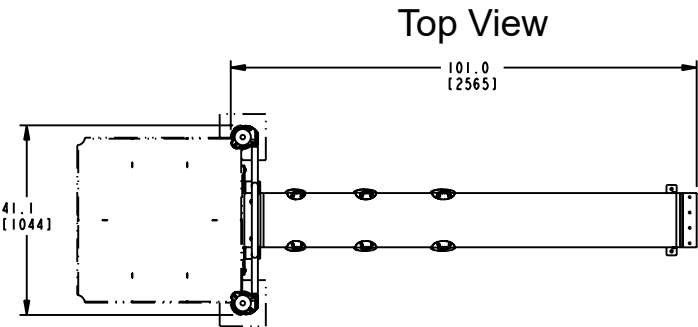


ASTM F1487: 48" (1219 mm)
CSA-Z614: 1219 mm
EN1176: 1219 mm

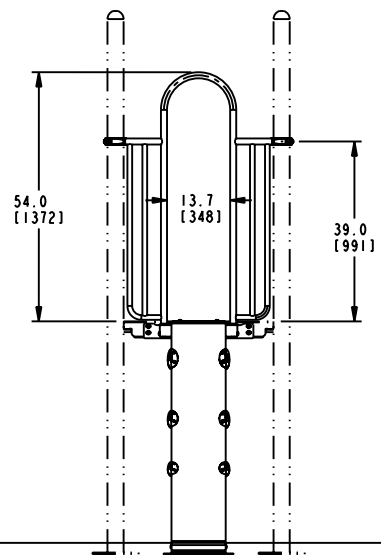
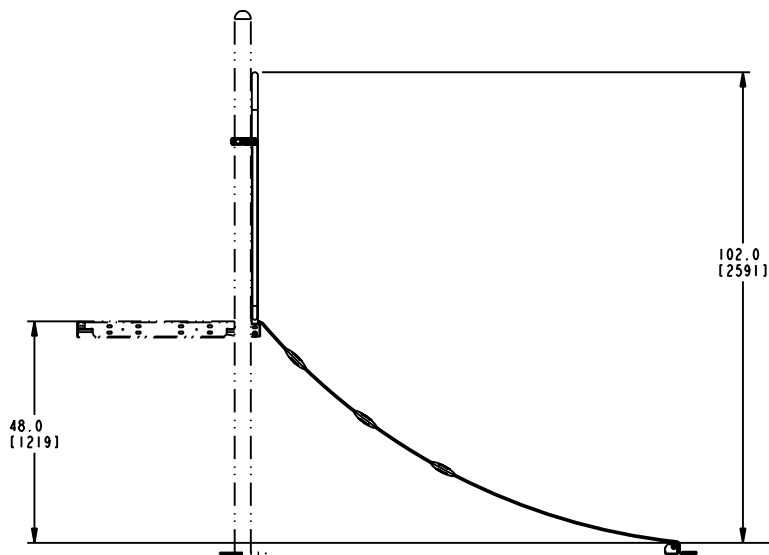


Installation Instructions

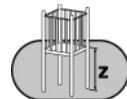
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram



Elevation Views
CH8266S

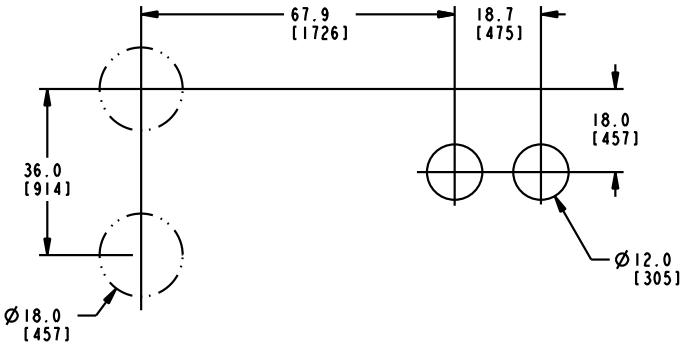
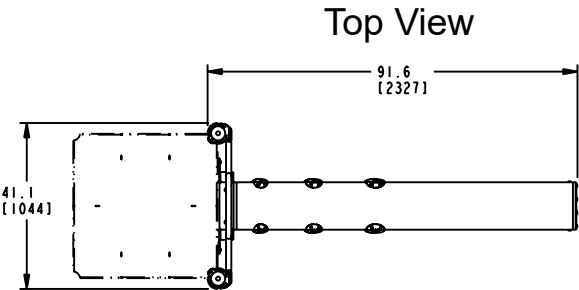


ASTM F1487: 48" (1219 mm)
CSA-Z614: 1219 mm
EN1176: 1219 mm

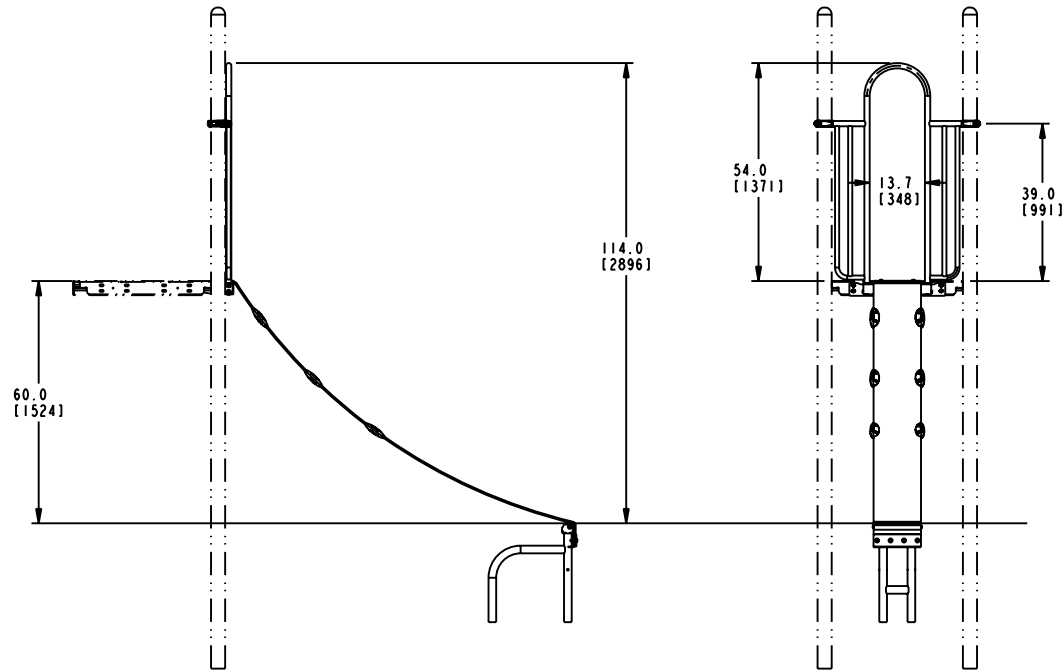


Installation Instructions

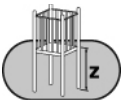
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram



Elevation Views
CH8267

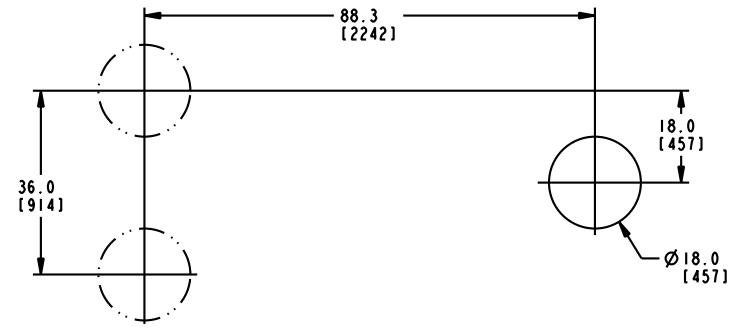
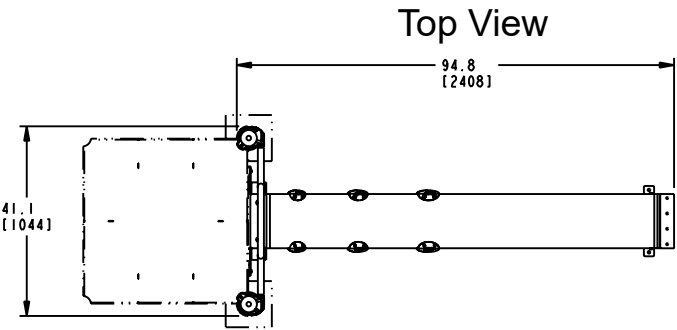


ASTM F1487: 60" (1524 mm)
CSA-Z614: 1524 mm
EN1176: 1524 mm

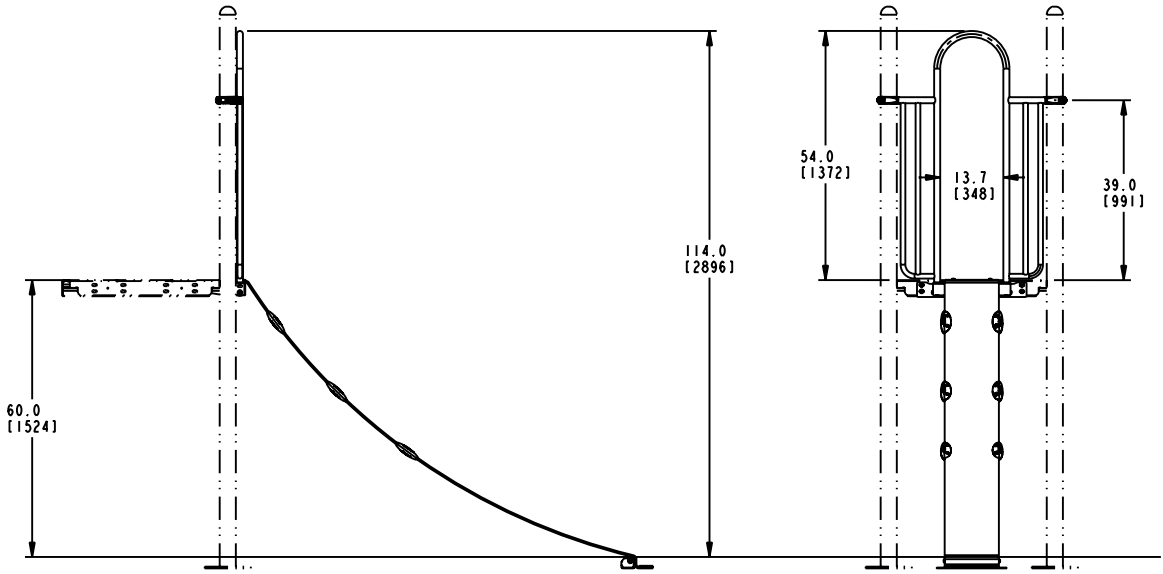


Installation Instructions

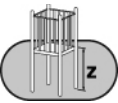
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram



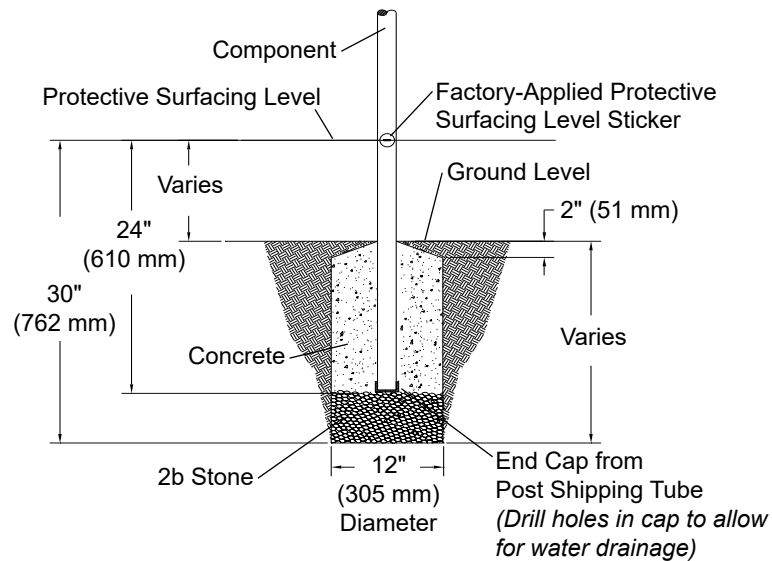
Elevation Views
CH8267S



ASTM F1487: 60" (1524 mm)
CSA-Z614: 1524 mm
EN1176: 1524 mm



Installation Instructions

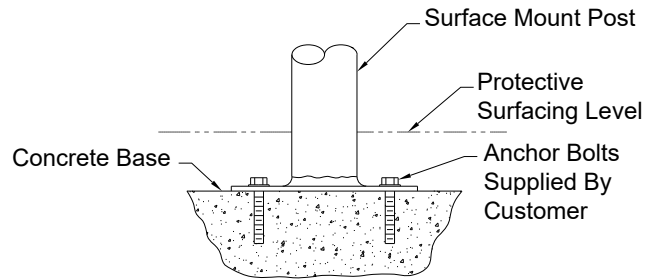


Component Footing Detail (ASTM/CSA)

FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete.
Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
- Component footing depth equals 30 in. (762 mm) less the depth of the protective surfacing material. The post is designed to have 12" (305 mm) in concrete.
Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 18 in. (457 mm).
- Some support posts and component support legs may have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone or porous block.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

Installation Instructions



Surface Mount Footing Detail

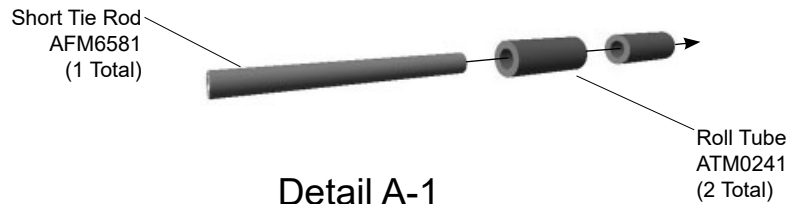
FOOTING NOTES

- All support posts and component support legs may have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Footing size may vary due to local soil and weather conditions.
- Base of footing must be below frost line.
- Comparison of protective surfacing materials is available in [Handbook for Public Playground Safety](#) published by U. S. Consumer Product Safety Commission.

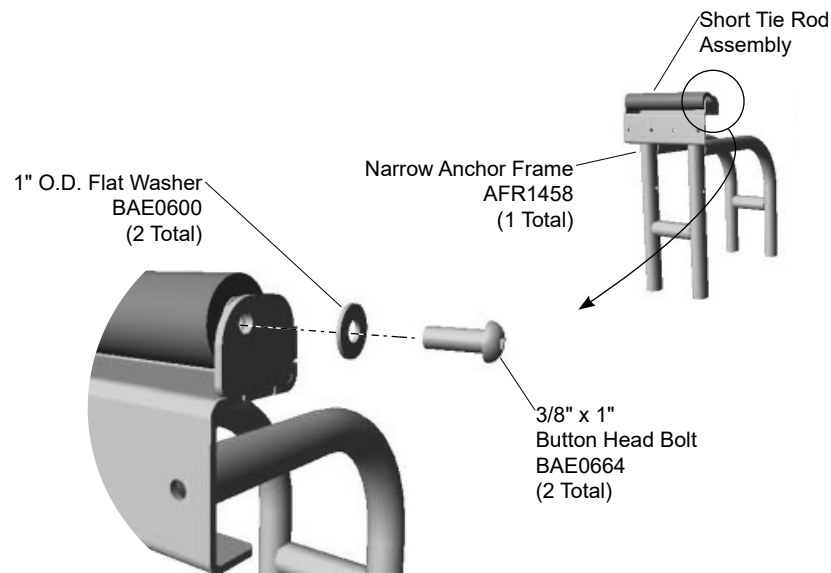
Surface mount hardware is not supplied. Customer is responsible for concrete base and providing surface mount hardware as specified by a registered structural engineer for each specific project application.

Installation Instructions

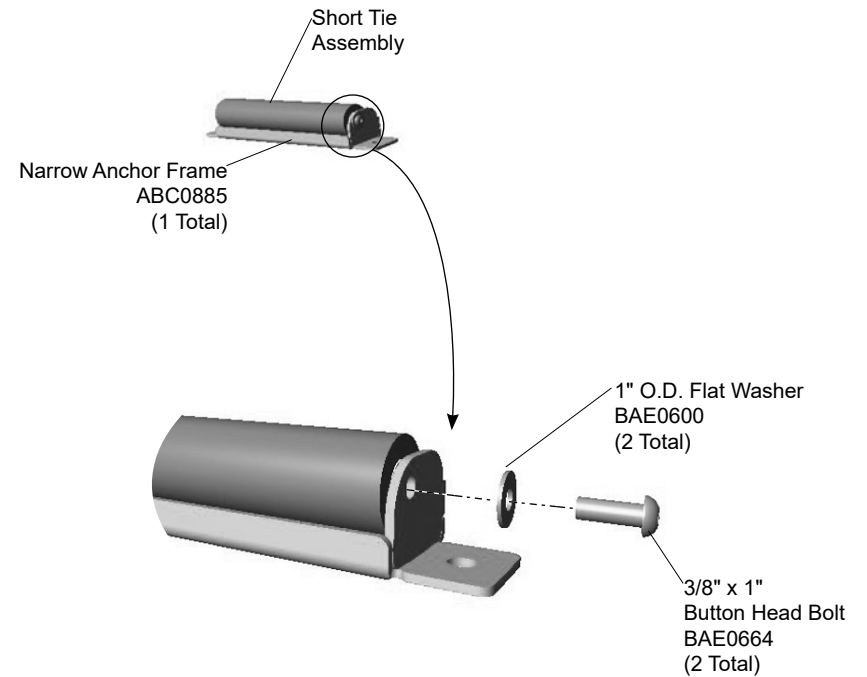
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 16.



Insert and center the tie rod through the roll tubes.



Attach the tie rod assembly to the anchor frame.



Attach the tie rod assembly to the anchor frame.

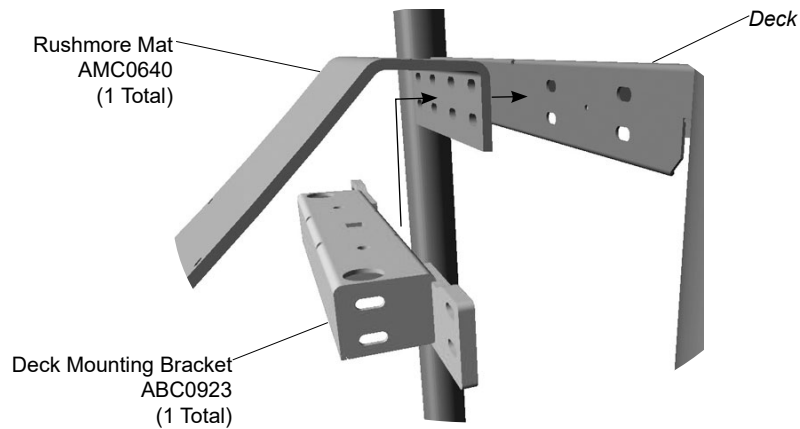
Details A-1 and A-2

Step 4



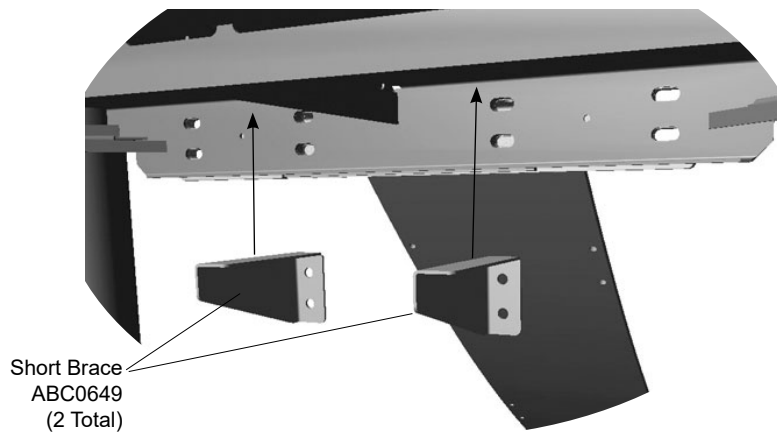
Assemble and attach the tie rod to the anchor frame.

Installation Instructions



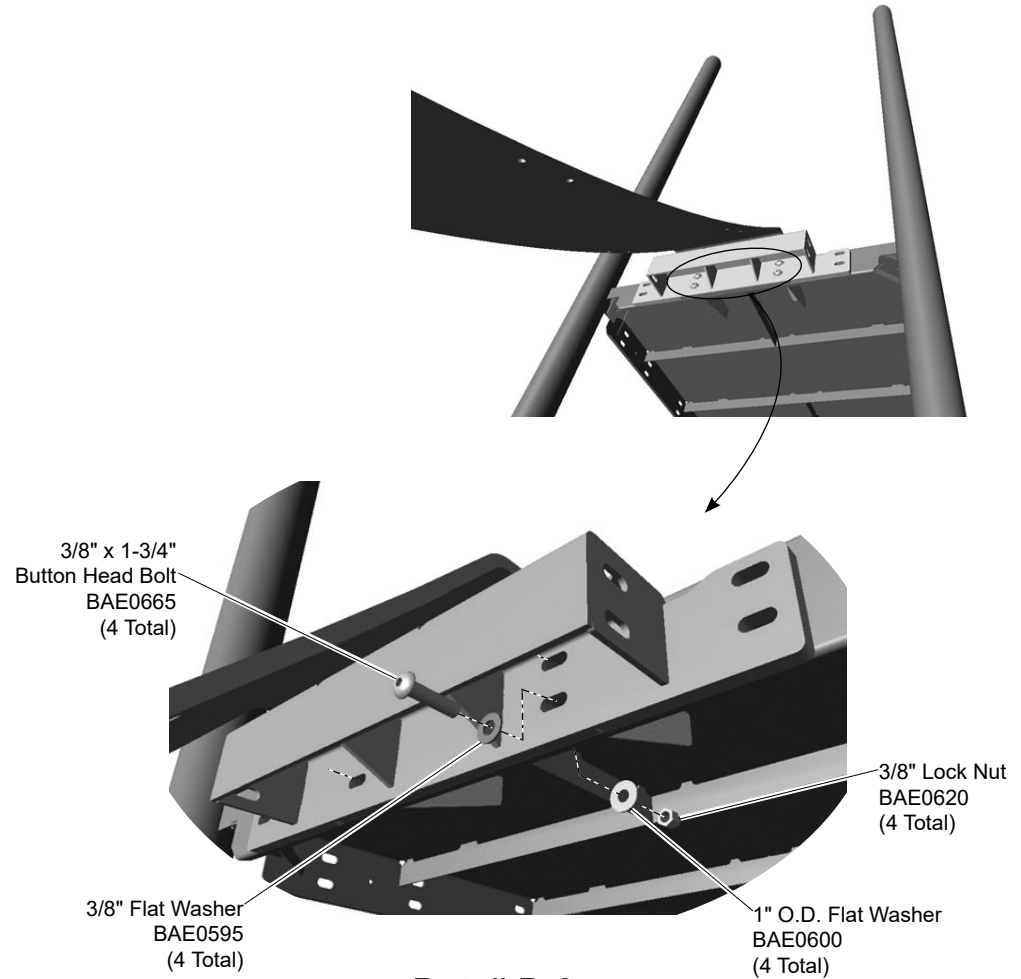
Detail B-1

Position the mat and mounting bracket against the deck with the middle holes aligned in each.



Detail B-2

From underneath the deck position the short braces against the bottom of the deck with the holes in the braces aligned with the middle holes in the deck.



Detail B-3

Attach the mat, the mounting bracket and short braces to the deck.

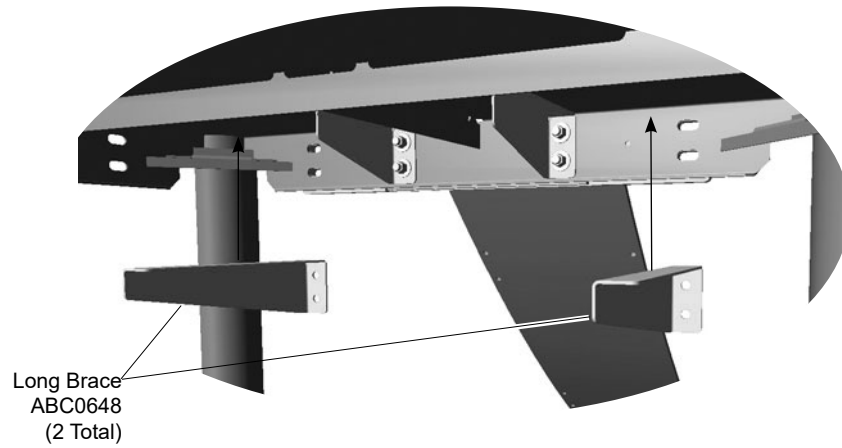
Details B-1, B-2 and B-3

Step 5

Attach the mat to the deck (middle holes connection).

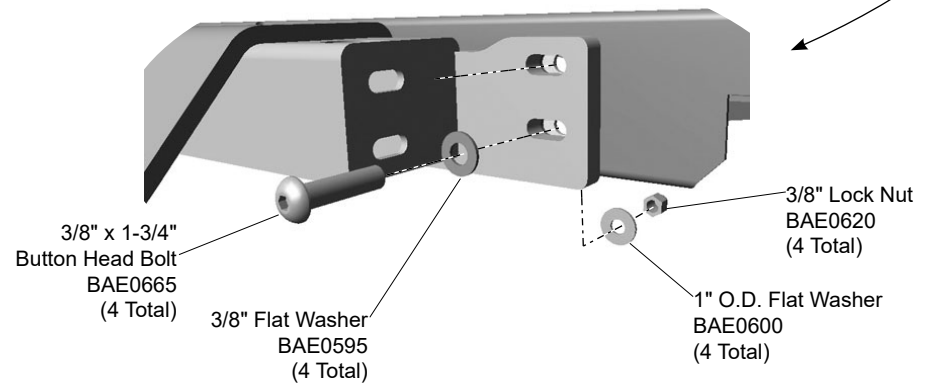


Installation Instructions



Detail C-1

From underneath the deck position the long braces against the bottom of the deck with the holes in the braces aligned with the outer holes in the deck.



Detail C-2

Attach the mounting bracket and long braces to the deck.

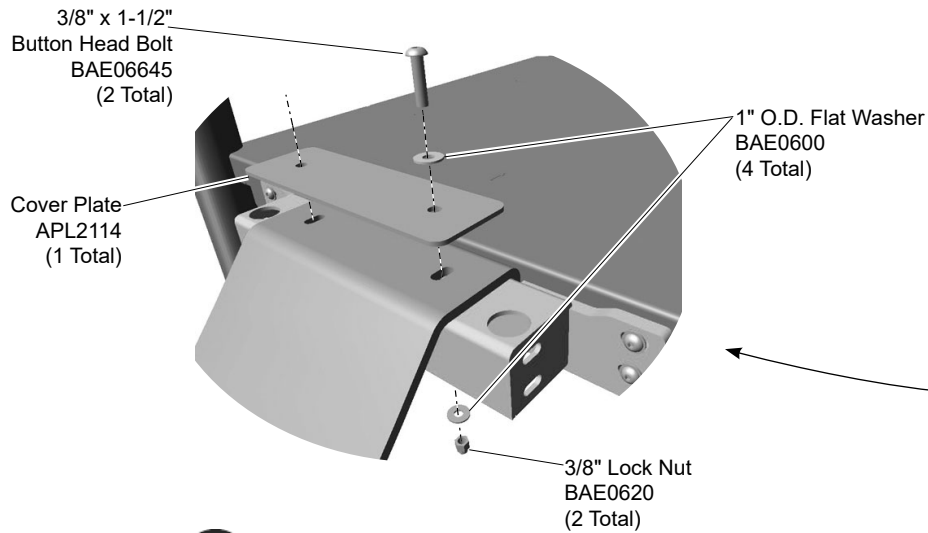
Details C-1 and C-2

Step 6

*Attach the mounting bracket and long braces to the deck
(outer holes connection).*

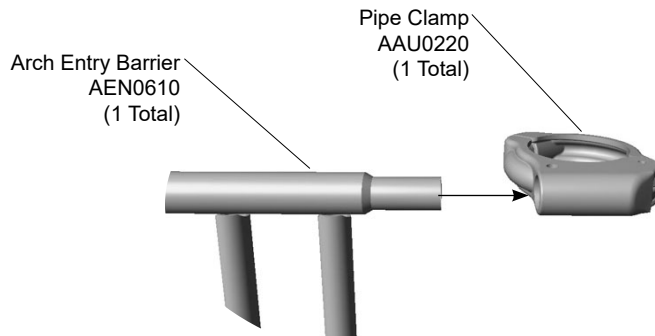
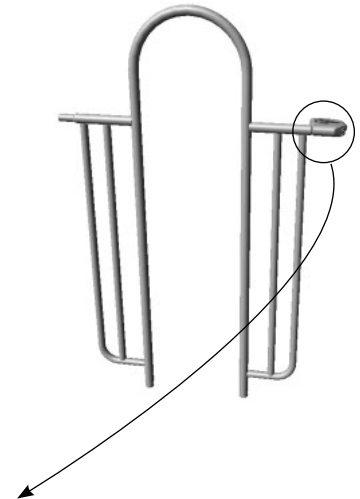
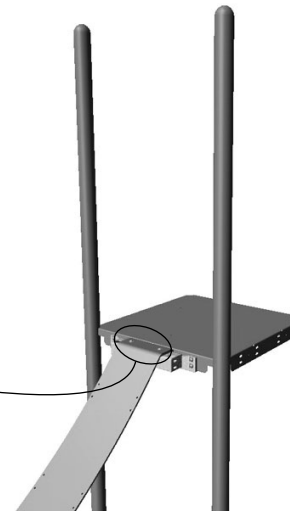


Installation Instructions

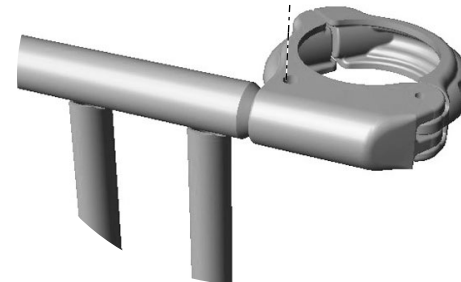


Detail D Step 7

Attach the cover plate to the mat and mounting bracket.



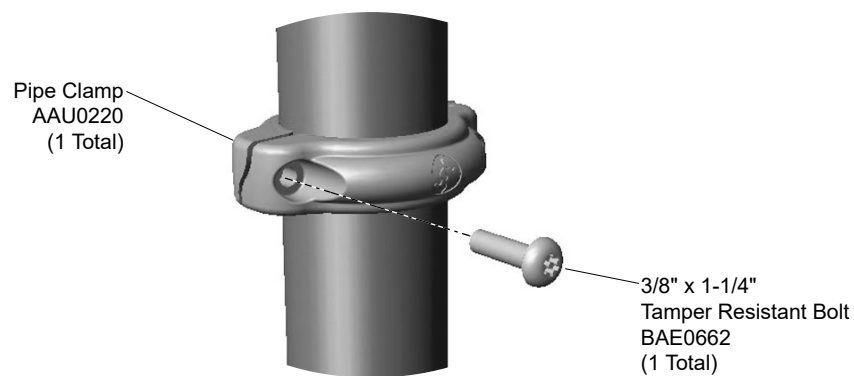
3/8" x 1/2" Set Screw
BAE0630
(1 Total)



Detail E Step 8

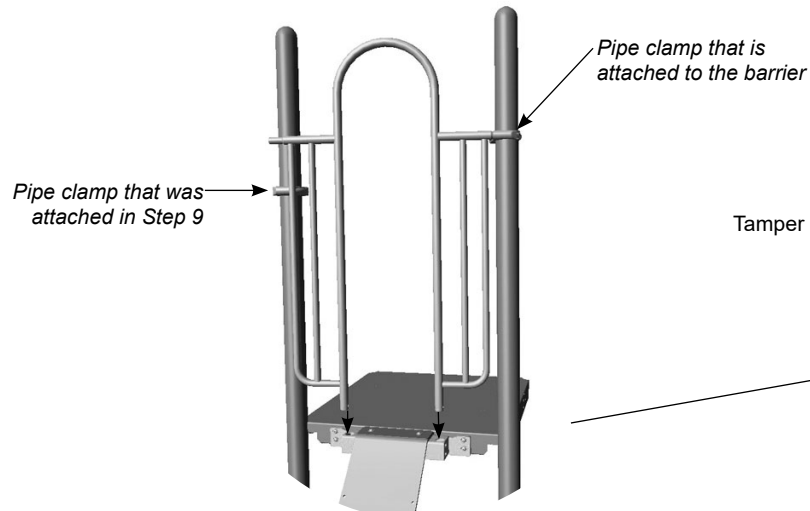
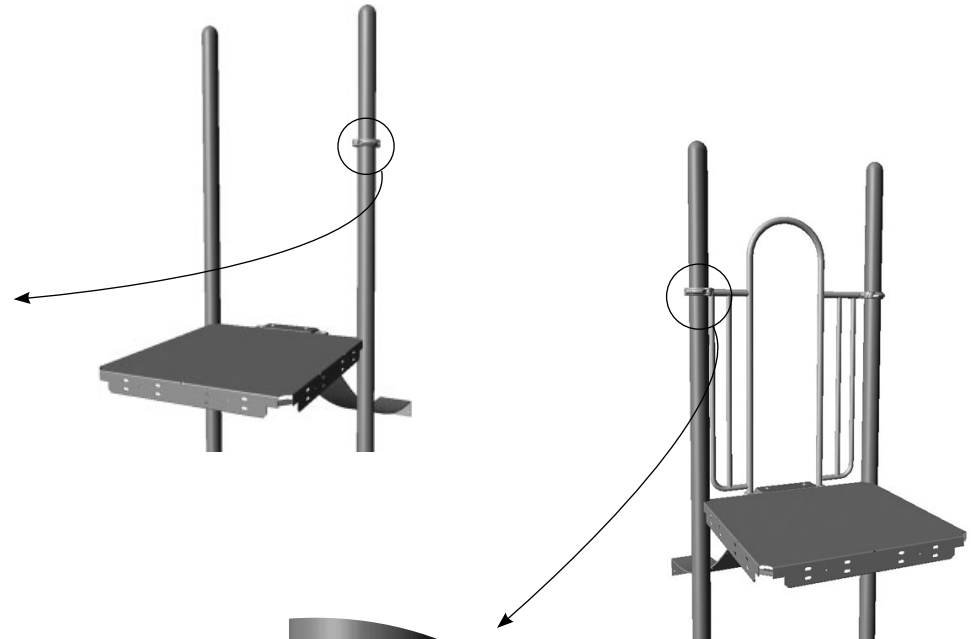
Attach a clamp to one end of the arch entry barrier.

Installation Instructions



Detail F Step 9

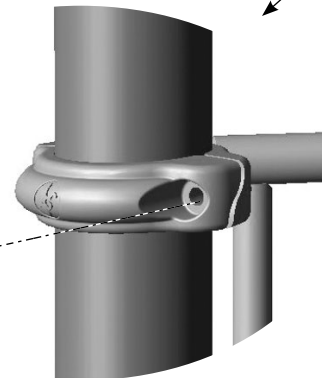
Attach a clamp to opposite support post from which the clamp on the arch entry barrier will be attached.



Detail G-1

Insert the barrier bottom rungs into the deck mounting bracket and close the clamp around the support post.

3/8" x 1-1/4"
Tamper Resistant Bolt
BAE0662
(1 Total)



Detail G-2

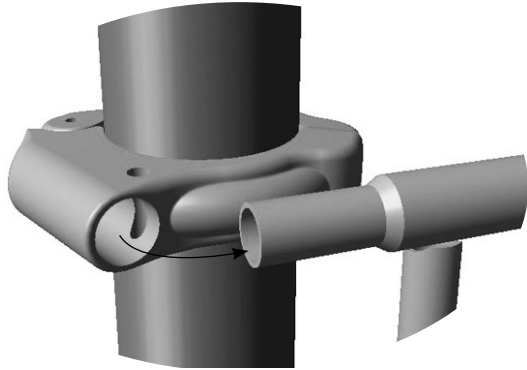
Attach the barrier clamp to the support post.

Details G-1 and G-2 Step 10



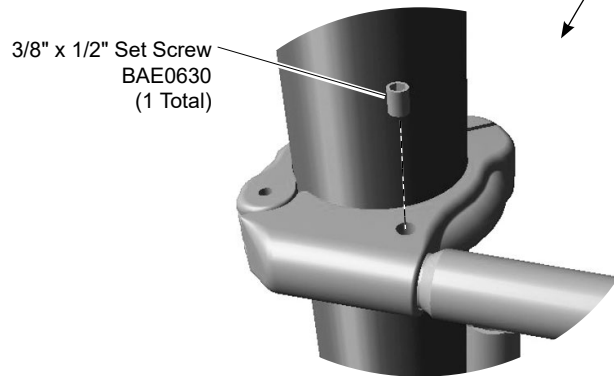
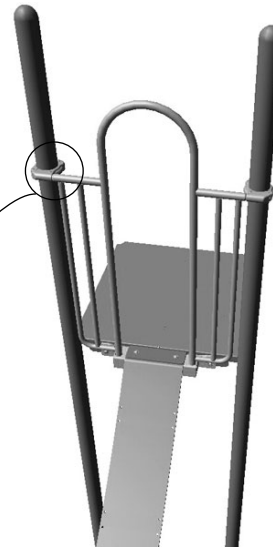
Attach the arch entry barrier to the open support post.

Installation Instructions



Detail H-1

Turn the clamp around to accept the open top rail of the arch entry barrier.



3/8" x 1/2" Set Screw
BAE0630
(1 Total)

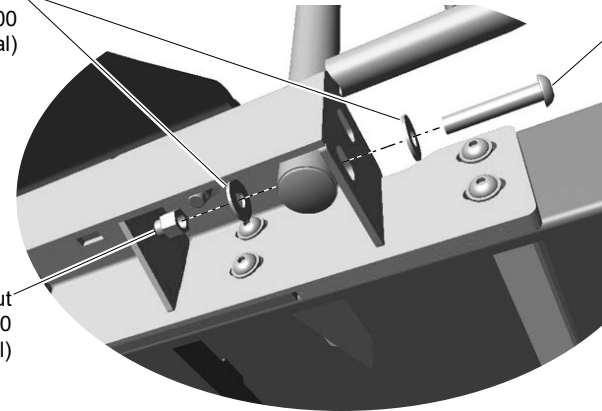
Detail H-2

Attach the clamp to the barrier.

1" O.D. Flat Washer
BAE0600
(4 Total)

3/8" Lock Nut
BAE0620
(2 Total)

3/8" x 2" Button Head Bolt
BAE06673
(2 Total)



Detail I
Step 12

Attach the arch entry barrier to the deck mounting bracket.

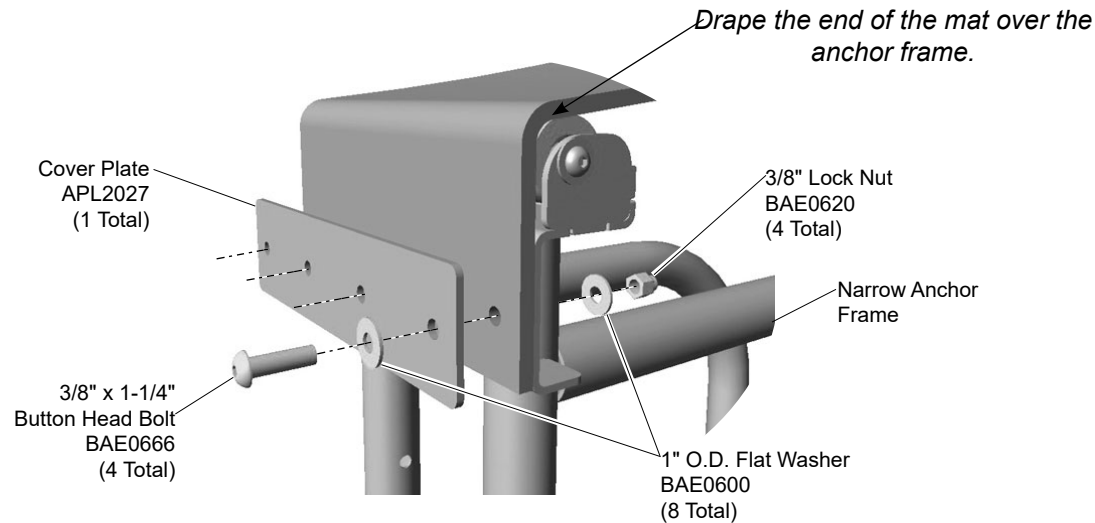
Details H-1 and H-2

Step 11

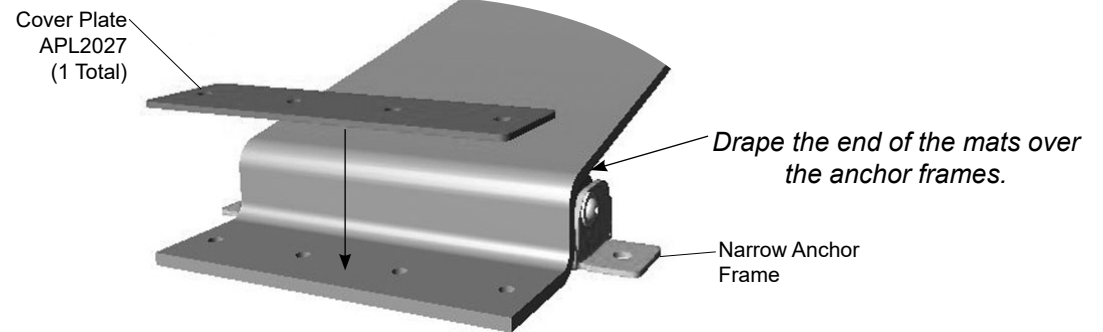
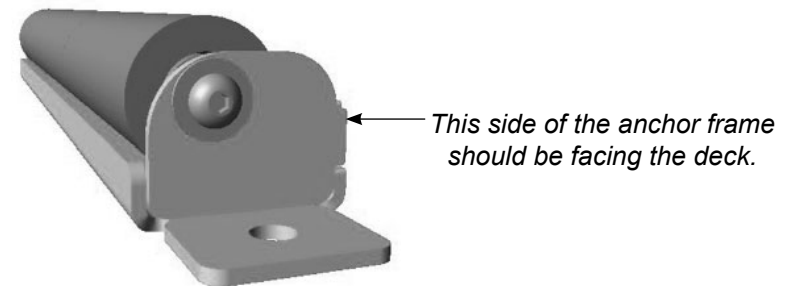
Attach the arch entry barrier to the clamp on the other support post.



Installation Instructions



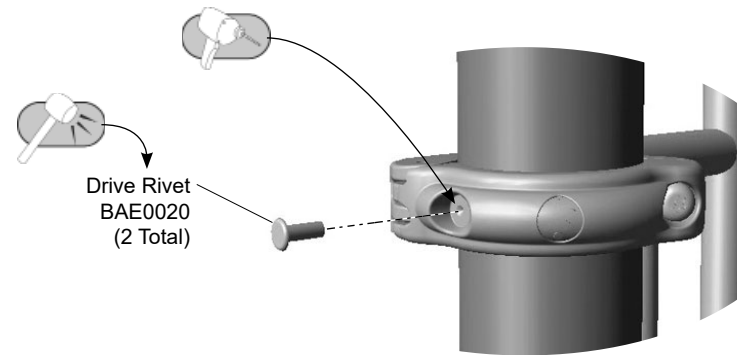
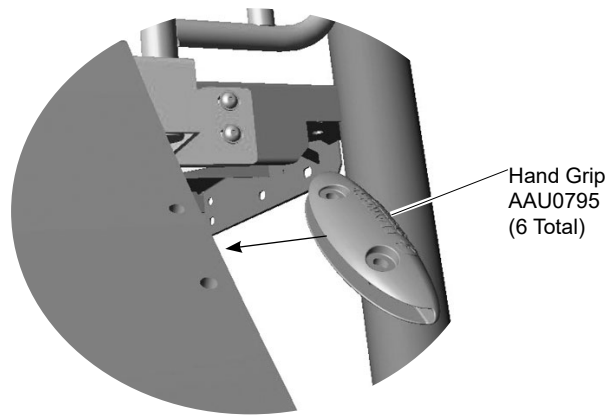
Detail J
Step 13
(In-Ground Model)
Attach the mat to the anchor frame.



Important Note: Hardware to bolt the mat and anchor frame to the surface is provided by the customer.

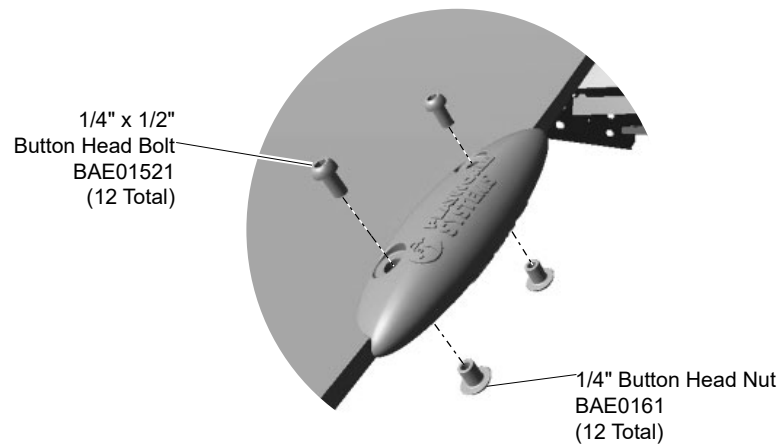
Detail J
Step 13
(Surface Mount Model)
Prepare the mat to the anchored.

Installation Instructions



Detail L
Step 16

Secure the clamps to the support posts.



Detail K
Step 15



Attach the hand grips to the mat.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate or prepare the footings as shown in the **Footing Details** in the *Guidelines* at the beginning of this instruction booklet and on pages 6 and 7 of this installation document. For the in-ground model, use the **Component Footing Detail**.

Step 4: Assemble and attach the tie rod to the anchor frame. See **Details A-1 and A-2 (in-ground or surface mount)**. Insert and center the tie rod through the roll tubes. Insert the tie rod assembly into the top of the appropriate frame (either in-ground or surface mount) and attach as shown. Fully tighten the connections according to tightening torque specifications (See **Final Details**).

Step 5: Attach the mat to the deck (middle holes connection). See **Details B-1, B-2 and B-3**. Position the mat and mounting bracket against the deck with the middle holes aligned in each. From underneath the deck position the short braces against the bottom of the deck with the holes in the braces aligned with the middle holes in the deck. Attach the mat, the mounting bracket and short braces to the deck as shown.

Step 6: Attach the mounting bracket and long braces to the deck (outer holes connection). See **Details C-1 and C-2**. From underneath the deck position the long braces against the bottom of the deck with the holes in the braces aligned with the outer holes in the deck. Attach the mounting bracket and long braces to the deck as shown.

Step 7: Attach the cover plate to the mat and mounting bracket. See **Detail D**. Position the cover plate on top of the mat and align the holes in the plate with those in the mat and mounting bracket and attach as shown.

Step 8: Attach a clamp to one end only of the arch entry barrier. See **Detail E**. Place a clamp on one end of the barrier top rail, and attach as shown.

Step 9: Attach a clamp to opposite support post from which the clamp on the arch entry barrier will be attached. See **Detail F**. Close the clamp around the post at the height shown in the **Elevation View**, and attach as shown.

Step 10: Attach the arch entry barrier to the open support post. See **Details G-1 and G-2**. Insert the barrier bottom rungs into the deck mounting bracket and close the clamp around the support post. Attach the barrier clamp to the support post as shown.

Step 11: Attach the arch entry barrier to the clamp on the other support post. See **Details H-1 and H-2**. Turn the clamp around on the other support post to accept the open top rail of the arch entry barrier. Insert the top rail into the clamp, and attach as shown.

Step 12: Attach the arch entry barrier to the deck mounting bracket. See **Detail I**. Align the hole in each barrier rung with a hole in the bracket and attach as shown.

Step 13: In-Ground Model - Attach the mat to the anchor frame. See **Detail J**. Position the anchor frame in its designated holes and attach the mat as shown. Fully tighten the connections according to tightening torque specifications. Surface Mount Model - Place the footing frame on its designated footing, drape the end of the mat over top and place the cover plate on top of the mat with the holes aligned. See **Detail J**.

Important Note: Hardware to bolt the mat and anchor frame to the surface is provided by the customer.

Installation Instructions

Final Details.

Step 14: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

In-Ground: Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Surface Mount: Bolt down all surface mount supports in accordance with specifications provided by your registered structural engineer.

Important Note: Surface mount hardware is not supplied. Customer is responsible for concrete base and for providing surface mount hardware as specified by a registered structural engineer for each specific project application.

Step 15: Attach the hand grips to the mat. See **Detail K**. Place the hand grips over the holes along the left and right edges of the mat and attach as shown. Fully tighten the connections according to tightening torque specifications.

Step 16: Install drive rivets to secure the clamps to the posts. See **Detail L**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

CH8266 - RUSHMORE 48 in. (1219 mm) SINGLE FLEX TREAD

PART NO.	DESCRIPTION	QTY.
AAU0220	CLAMP - 3-1/2" PIPE DIE CAST	2
AAU0795	RUSHMORE HANDLE	6
ABC0648	BRACKET - 1.50" x 3.12" x 11.25"	2
ABC0649	BRACKET - 1.50" x 3.12" x 6.00"	2
ABC0923	BRACKET - 23.75" x 3.91" x 3.18"	1
AEN0610	BARRIER - 57.36" x 36.58" ARCH ENTRY	1
AFM6581	FAB METAL - 1.029" O.D. x 11.00" w/INSERTS	1
AFR1458	FRAME - RUSHMORE FOOTING (CENTER)	1
AMC0640	RUSHMORE - MAT	1
APL2027	PLATE - 11.75" x 3.00" x 7 GA	1
APL2114	PLATE - 11.75" x 3.50" x 8 GA	1
ATM0241	2.00" O.D. x 5.66" TUBE	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE01521	BOLT - 1/4"-20 x 1/2" BUTTON HEAD - SS	12
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	12
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	26
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	16
BAE0630	SCREW - 3/8"-16 x 1/2" SOCKET SET SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	2
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	2
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4
BAE06673	BOLT - 3/8"-16 x 2" BUTTON HEAD - SS	2

CH8266S - RUSHMORE 48 in. (1219 mm) SINGLE FLEX TREAD SM

PART NO.	DESCRIPTION	QTY.
AAU0220	CLAMP - 3-1/2" PIPE DIE CAST	2
AAU0795	RUSHMORE HANDLE	6
ABC0648	BRACKET - 1.50" x 3.12" x 11.25"	2
ABC0649	BRACKET - 1.50" x 3.12" x 6.00"	2
ABC0885	BRACKET - RUSHMORE ANCHOR (SHORT)	1
ABC0923	BRACKET - 23.75" x 3.91" x 3.18"	1
AEN0610	BARRIER - 57.36" x 36.58" ARCH ENTRY	1
AFM6581	FAB METAL - 1.029" O.D. x 11.00" w/INSERTS	1
AMC0640	RUSHMORE - MAT	1
APL2027	PLATE - 11.75" x 3.00" x 7 GA	1
APL2114	PLATE - 11.75" x 3.50" x 8 GA	1
ATM0241	2.00" O.D. x 5.66" TUBE	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE01521	BOLT - 1/4"-20 x 1/2" BUTTON HEAD - SS	12
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	12
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	18
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	12
BAE0630	SCREW - 3/8"-16 x 1/2" SOCKET SET SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	2
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	2
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BAE06673	BOLT - 3/8"-16 x 2" BUTTON HEAD - SS	2

Bill of Materials

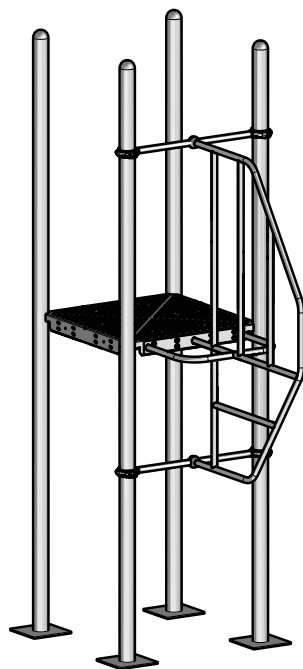
CH8267 - RUSHMORE 60 in. (1524 mm) SINGLE FLEX TREAD

PART NO.	DESCRIPTION	QTY.
AAU0220	CLAMP - 3-1/2" PIPE DIE CAST	2
AAU0795	RUSHMORE HANDLE	6
ABC0648	BRACKET - 1.50" x 3.12" x 11.25"	2
ABC0649	BRACKET - 1.50" x 3.12" x 6.00"	2
ABC0923	BRACKET - 23.75" x 3.91" x 3.18"	1
AEN0610	BARRIER - 57.36" x 36.58" ARCH ENTRY	1
AFM6581	FAB METAL - 1.029" O.D. x 11.00" w/INSERTS	1
AFR1458	FRAME - RUSHMORE FOOTING (CENTER)	1
AMC0640	RUSHMORE - MAT	1
APL2027	PLATE - 11.75" x 3.00" x 7 GA	1
APL2114	PLATE - 11.75" x 3.50" x 8 GA	1
ATM0241	2.00" O.D. x 5.66" TUBE	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE01521	BOLT - 1/4"-20 x 1/2" BUTTON HEAD - SS	12
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	12
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	26
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	16
BAE0630	SCREW - 3/8"-16 x 1/2" SOCKET SET SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	2
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	2
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	4
BAE06673	BOLT - 3/8"-16 x 2" BUTTON HEAD - SS	2

CH8267S - RUSHMORE 60 in. (1524 mm) SINGLE FLEX TREAD SM

PART NO.	DESCRIPTION	QTY.
AAU0220	CLAMP - 3-1/2" PIPE DIE CAST	2
AAU0795	RUSHMORE HANDLE	6
ABC0648	BRACKET - 1.50" x 3.12" x 11.25"	2
ABC0649	BRACKET - 1.50" x 3.12" x 6.00"	2
ABC0885	BRACKET - RUSHMORE ANCHOR (SHORT)	1
ABC0923	BRACKET - 23.75" x 3.91" x 3.18"	1
AEN0610	BARRIER - 57.36" x 36.58" ARCH ENTRY	1
AFM6581	FAB METAL - 1.029" O.D. x 11.00" w/INSERTS	1
AMC0640	RUSHMORE - MAT	1
APL2027	PLATE - 11.75" x 3.00" x 7 GA	1
APL2114	PLATE - 11.75" x 3.50" x 8 GA	1
ATM0241	2.00" O.D. x 5.66" TUBE	2
BAE0020	RIVET - 1/4" x 11/16" DRIVE	2
BAE01521	BOLT - 1/4"-20 x 1/2" BUTTON HEAD - SS	12
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	12
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	18
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	12
BAE0630	SCREW - 3/8"-16 x 1/2" SOCKET SET SS	2
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMP RESIST w/TORX DRIVE	2
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	2
BAE06645	BOLT - 3/8"-16 x 1-1/2" BUTTON HEAD - SS	2
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	8
BAE06673	BOLT - 3/8"-16 x 2" BUTTON HEAD - SS	2





Assembly View


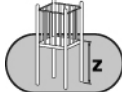

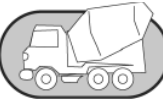
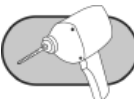

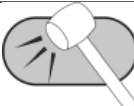
Installation Instructions

Challengers® Model CH8939 Transition Climber

Installation Preparation

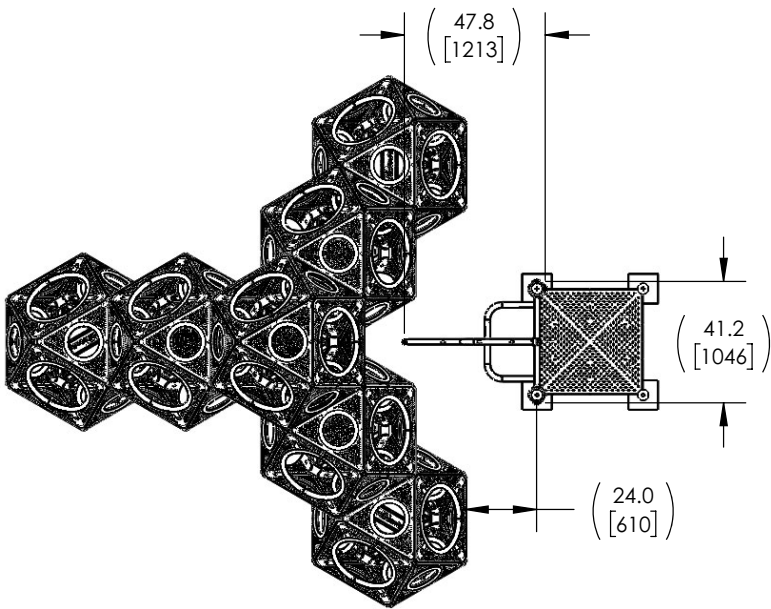
Recommended Crew: Two (2) adults
 Installation Time: 2 man-hours
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 5-12, EN: 6-14

ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

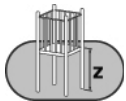
Installation Instructions

Top View

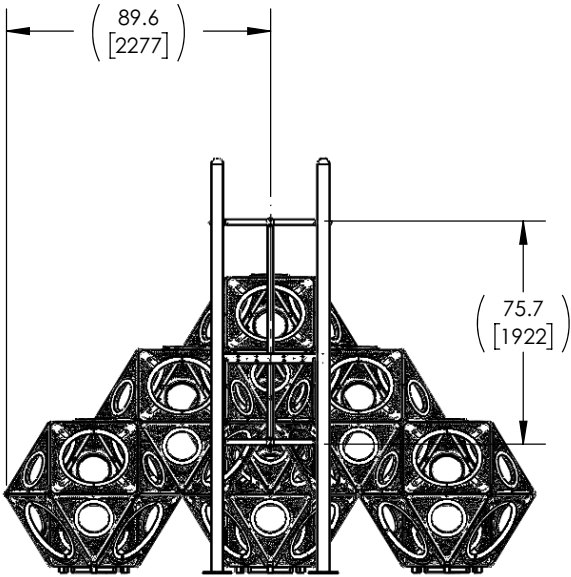
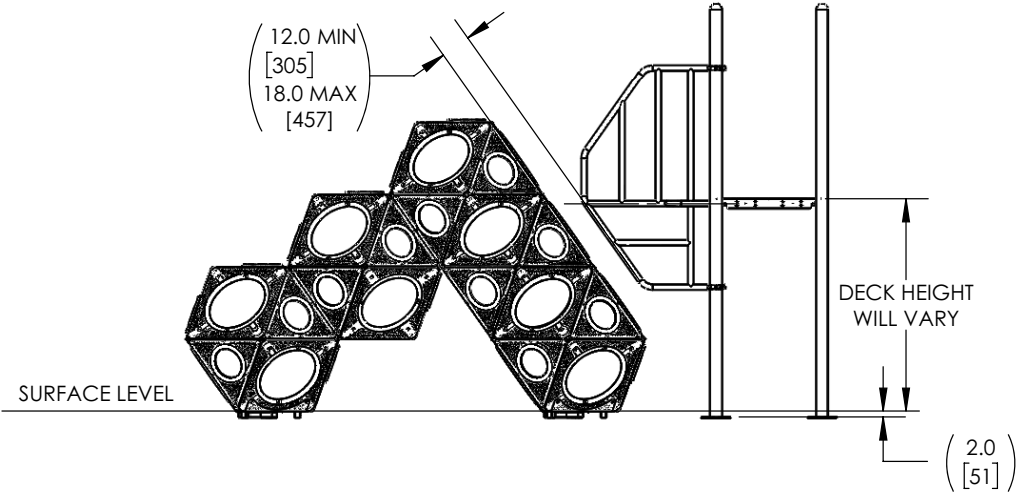


KEY

Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Critical Fall Height:
ASTM F1487: Equal to the height of the deck
CSA Z614: Equal to the height of the deck
EN1176: Equal to the height of the deck

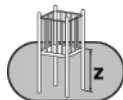
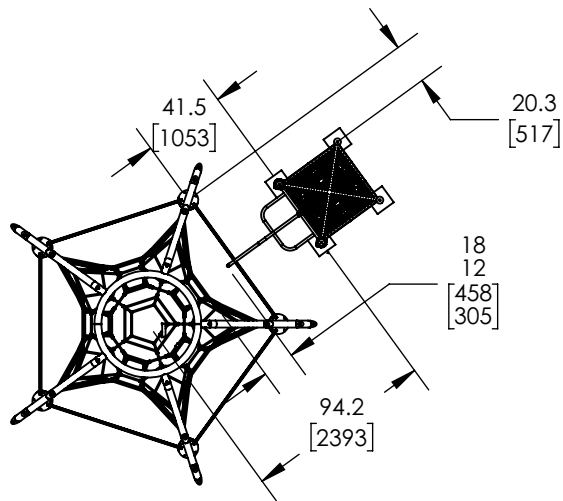


Elevation Views
ZZCH8939 with PlayCubes

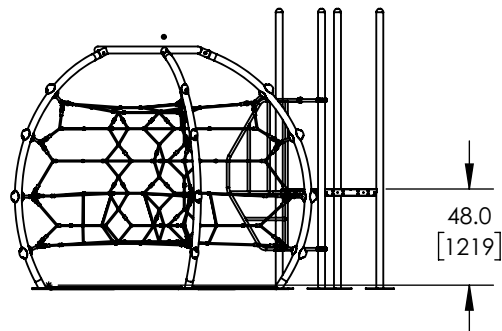
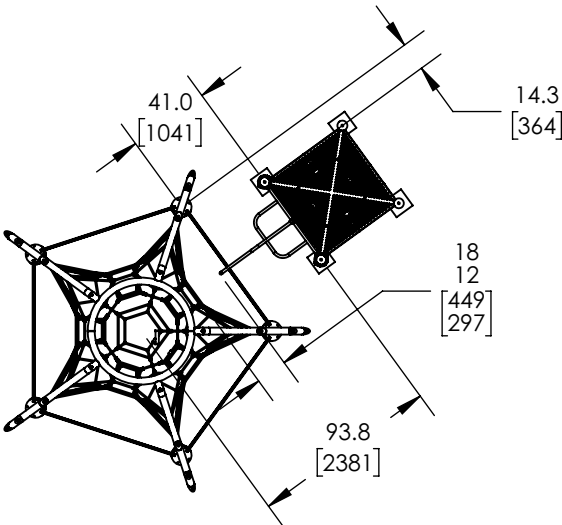


Installation Instructions

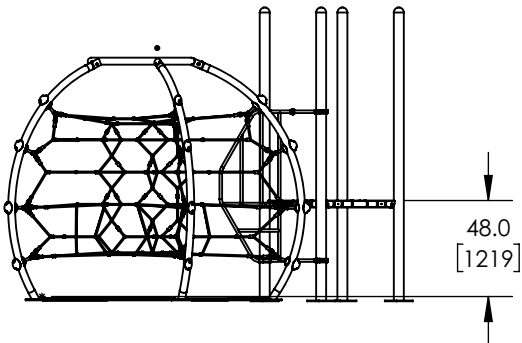
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Critical Fall Height:
ASTM F1487: Equal to the height of the deck
CSA Z614: Equal to the height of the deck
EN1176: Equal to the height of the deck



Elevation Views
ZZCH8939 with ZZXX1114S

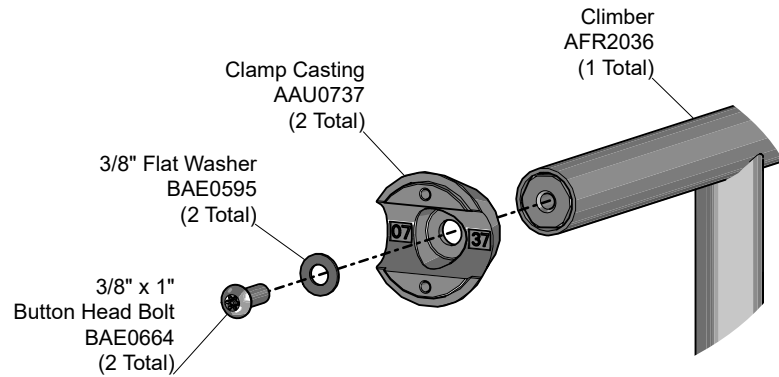


Elevation Views
ZZCH8939 with ZZXX1115S



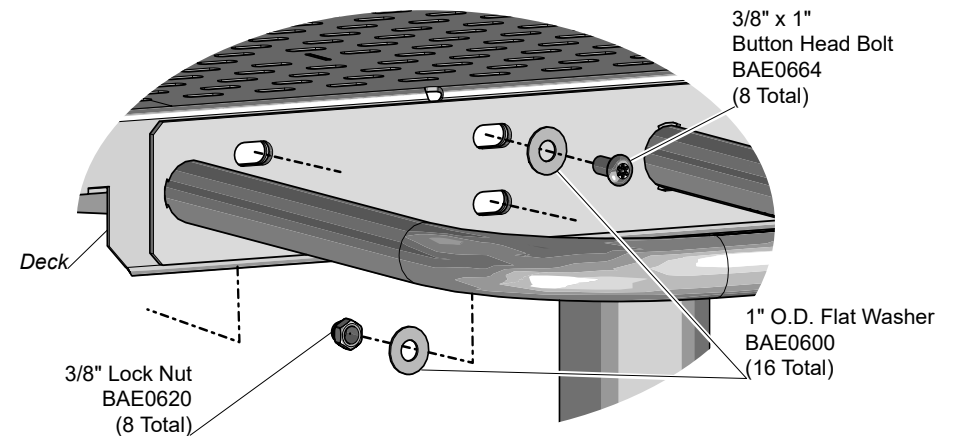
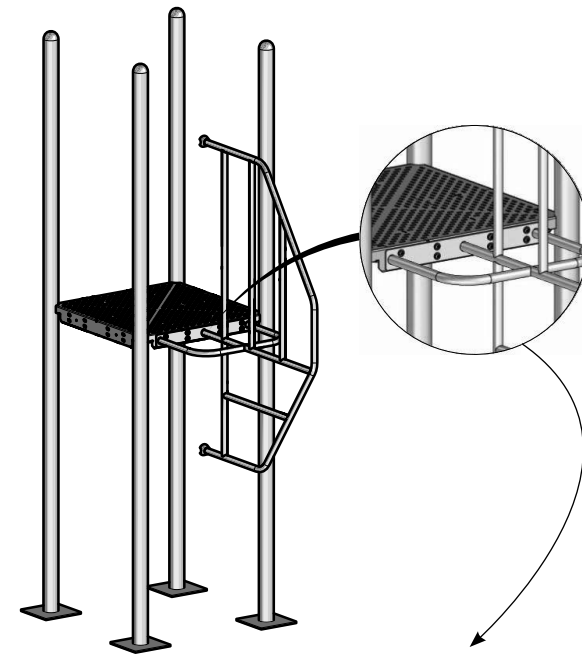
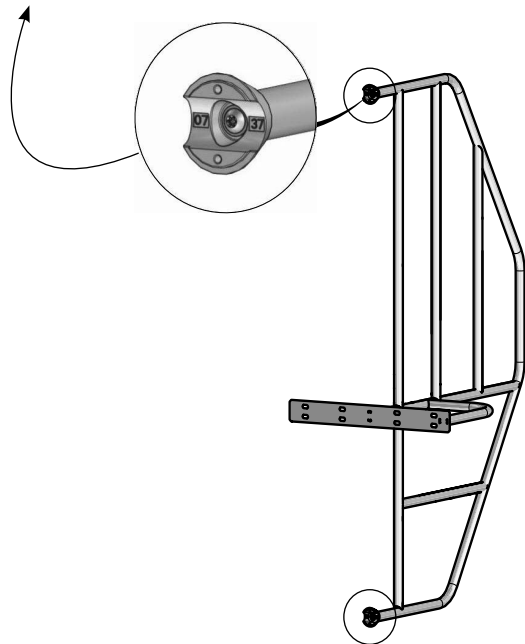
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 8.



Detail A
Step 3

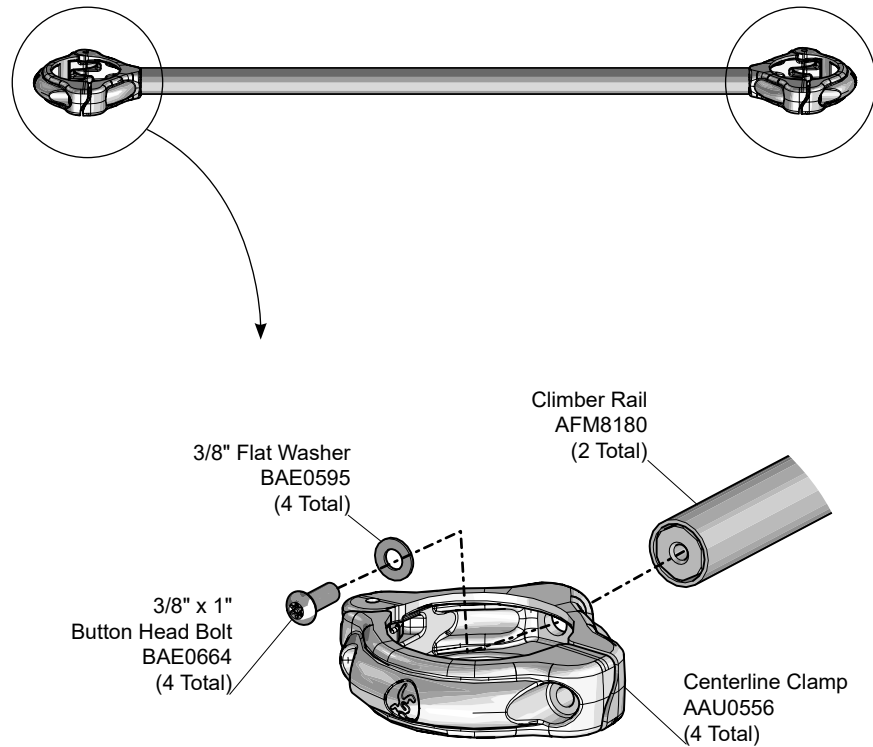
Attach the clamp castings to the climber.



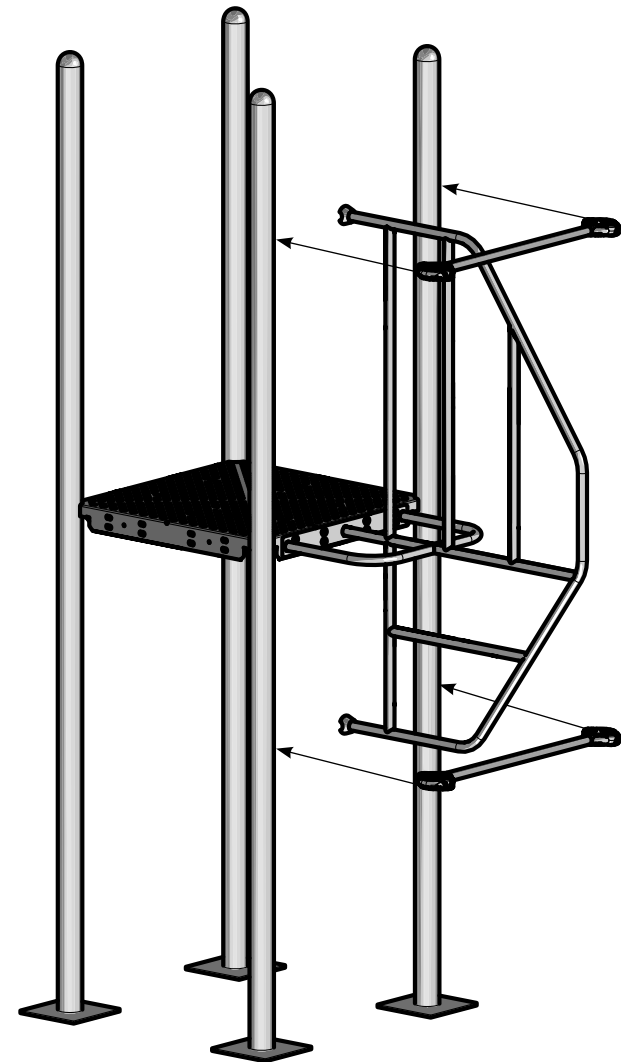
Detail B
Step 4

Attach the climber assembly to the deck.

Installation Instructions

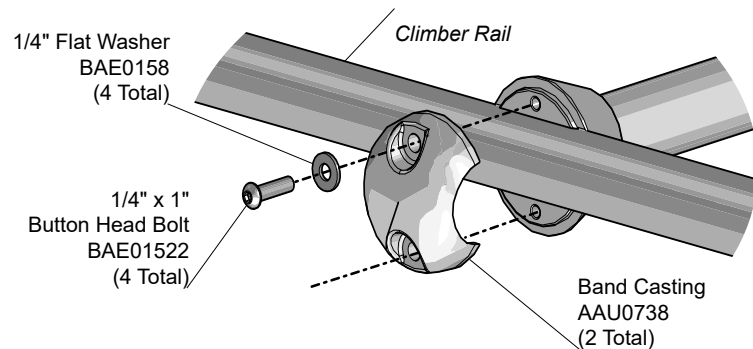


 **Detail C**
Step 5
Attach the clamps to the climber rails.



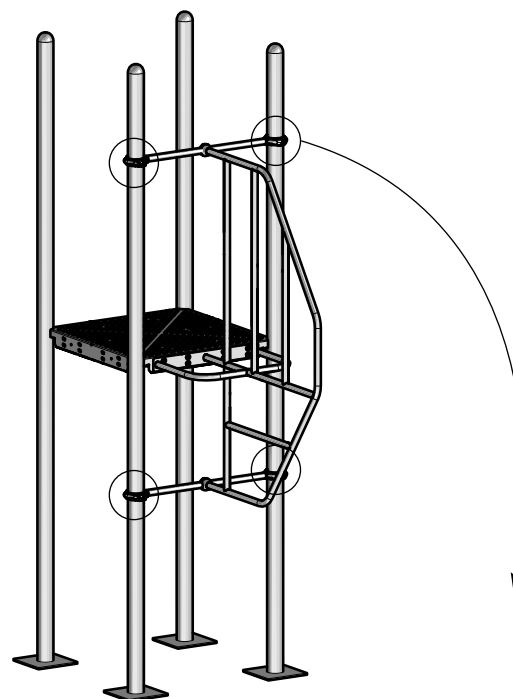
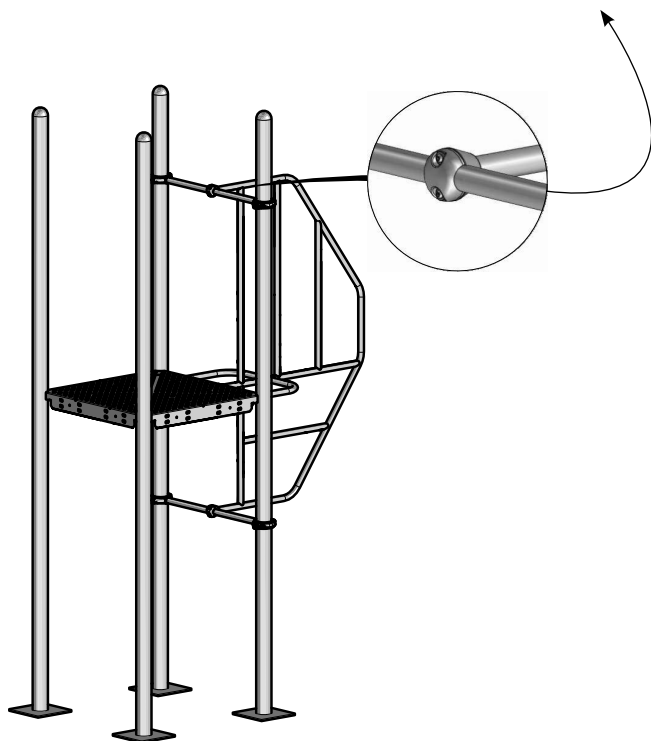
Place the climber rails on the support posts, see Elevation Views.

Installation Instructions

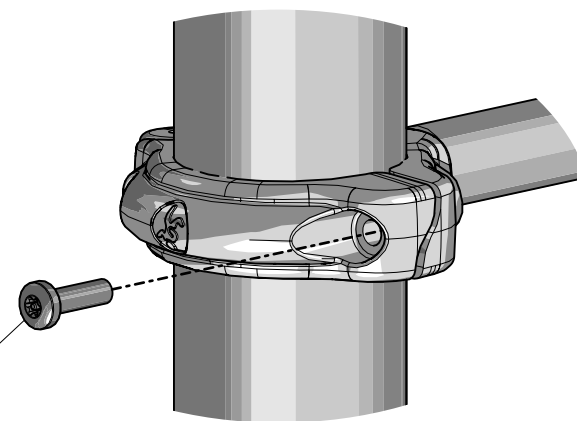


Detail D Step 6

Attach the climber rails to the climber assembly.



3/8" x 1-1/4"
Tamper Resistant Bolt
BAE0662
(4 Total)

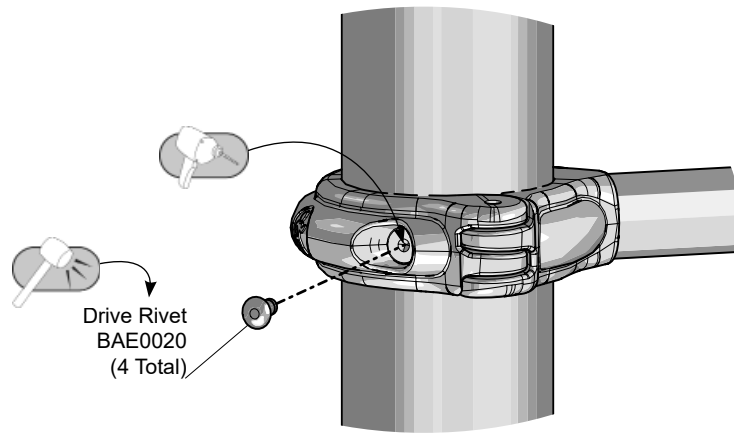


Detail E Step 8



Attach the clamps to the support posts.

Installation Instructions



Detail F

Step 9

Secure the centerline clamps to the support posts.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Attach the clamp castings to the climber. See **Detail A**. Place the clamp casting against the ends of the climber, and attach as shown.

Step 4: Attach the climber assembly to the deck. See **Detail B**. With adequate manpower, position the bracket on the climber assembly against the front of the deck. Close the clamps around the support posts. Attach the climber as shown.

Step 5: Attach the clamps to the climber rails. See **Detail C**. Position the neck of the clamps against the ends of the climber rails. Attach as shown.

Step 6: Attach the climber rails to the climber assembly. See **Detail D and Elevation View**. Place the climber rails on the support posts. Position each climber rail in the center of the clamp castings and place the band casting against the other side of the climber rail. Attach as shown.

Final Details.

Step 7: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 8: Attach the clamps to the support posts. See **Detail E**. With the clamps around the support posts, attach as shown.

Step 9: Install drive rivets. See **Detail F**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, drive the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

CH8939 - TRANSITION CLIMBER

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3.5" CENTERLINE DIECAST	4
AAU0737	CASTING - 1.315" DIA CLAMP	2
AAU0738	CASTING - 1.315" DIA BAND	2
AFM8180	FAB METAL - 1.315" O.D. x 30.50" w/CRIMPED INSERTS	2
AFR2036	FRAME - 27.00" x 45.37" x 75.72"	1
BAE0020	RIVET - 1/4" x 11/16" ALUMINUM DRIVE	4
BAE0158	WASHER - 1/4" SAE FLAT	4
BAE0595	WASHER - 3/8" SAE FLAT	6
BAE0600	WASHER - 1" O.D. FLAT	16
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	8
BAE0662	BOLT - 3/8"-16 x 1.25" TAMP RESIST w/TORX DRIVE	4
BAE0664	BOLT - 3/8"-16 x 1.00" BUTTON HEAD - SS	14
BAE01522	BOLT - 1/4"-20 x 1.00" BUTTON HEAD - SS	4

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Assembly View (representative model)

Installation Instructions


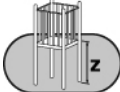

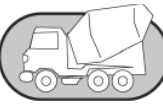
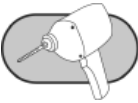


Challengers®

Models CH9168, CH9170 and CH9177
Deck to Deck Accessible Tiered Platform
12 in. (305 mm), 24 in. (610 mm) and
36" (914 mm) Rise Height

Installation Preparation

Recommended Crew: Two - Three (2-3) adults
Installation Time: 2 man-hours
Use Zone: Refer to Master Drawing
User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

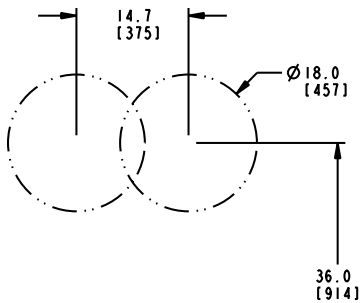
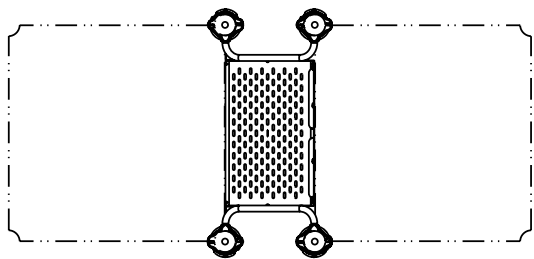
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

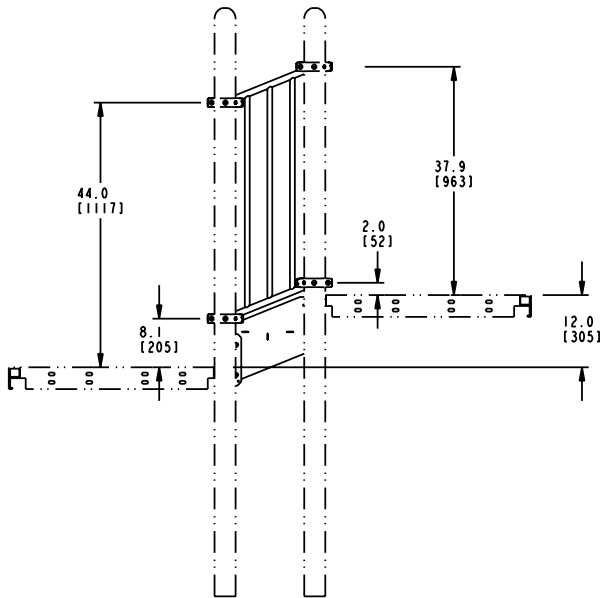
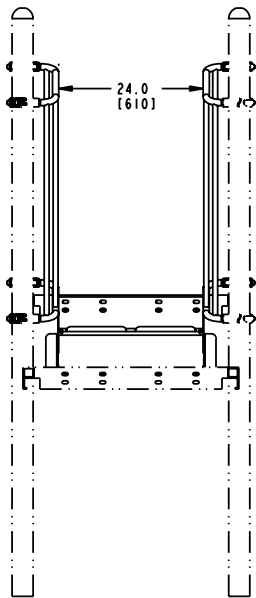
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

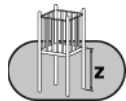
Top View



Footing Diagram



Elevation Views
CH9168



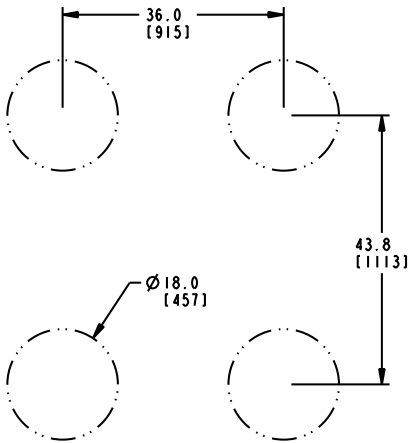
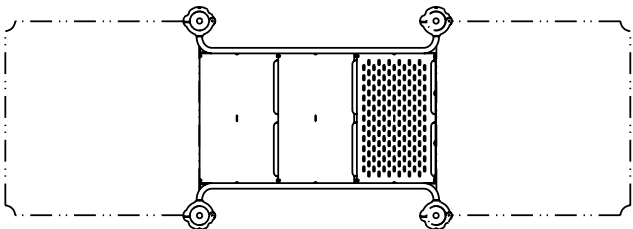
Height of the upper deck
minus 6" (152 mm)



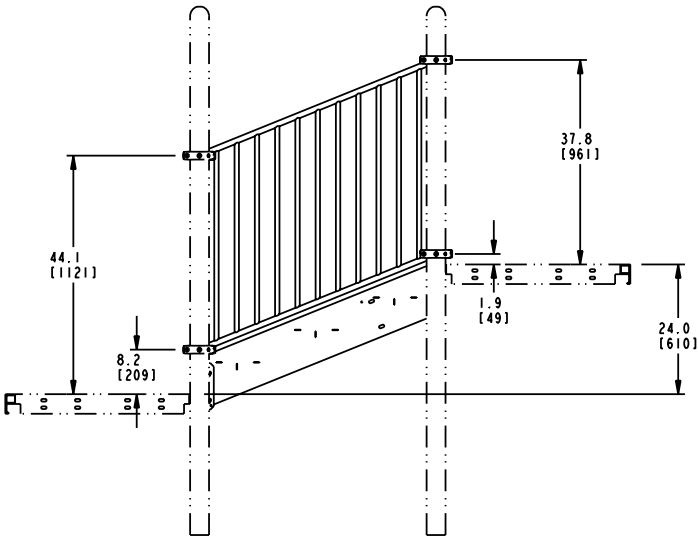
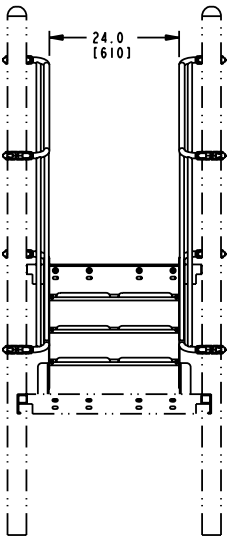
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

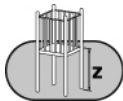
Top View



Footing Diagram



Elevation Views
CH9170



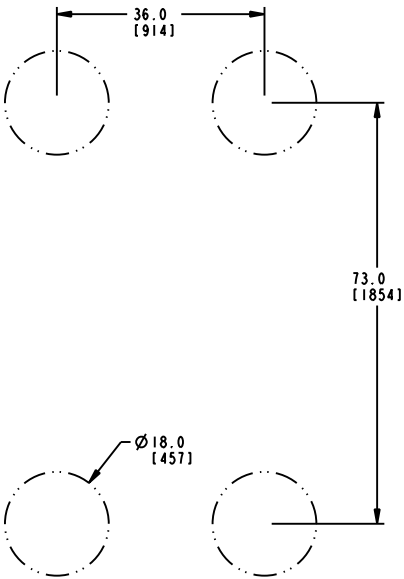
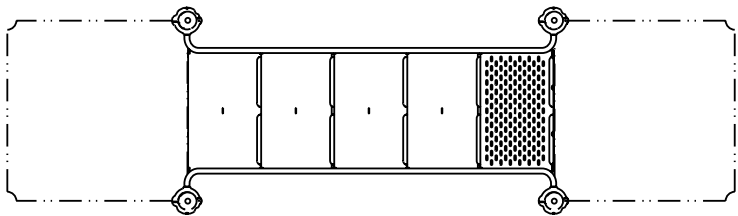
Height of the upper deck
minus 6" (152 mm)



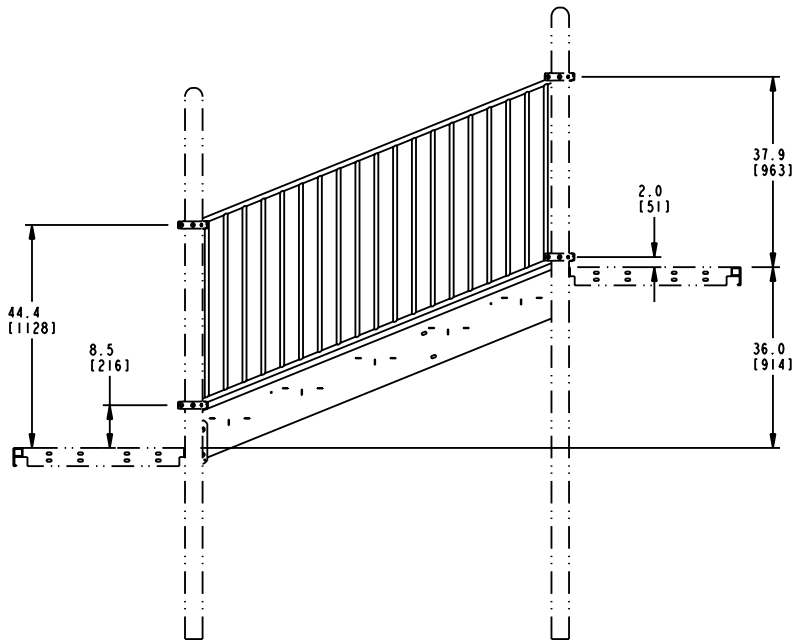
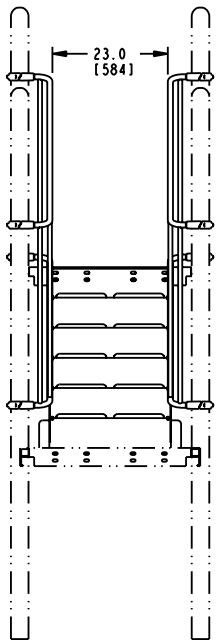
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

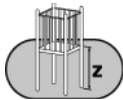
Top View



Footing Diagram



Elevation Views
CH9177

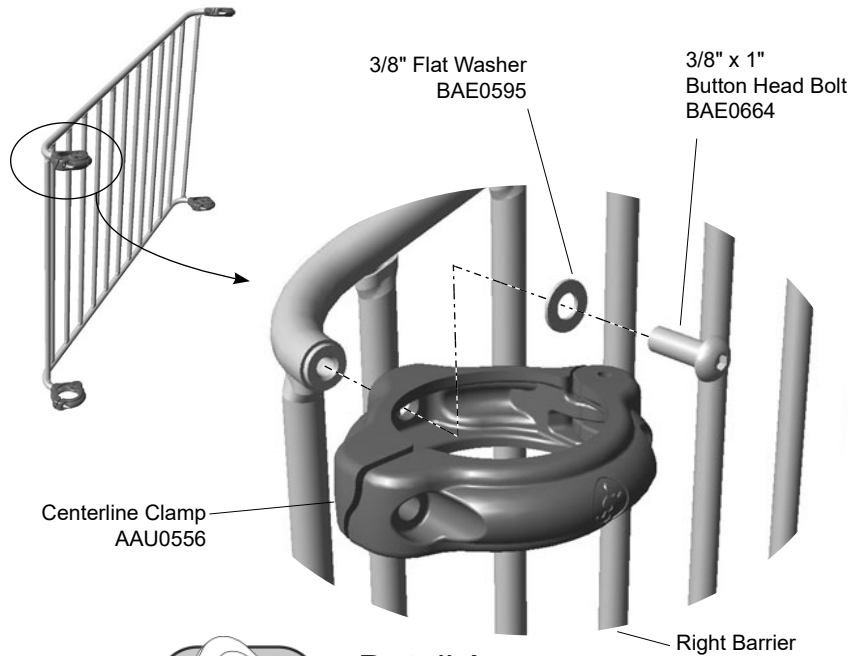


Height of the upper deck
minus 6" (152 mm)



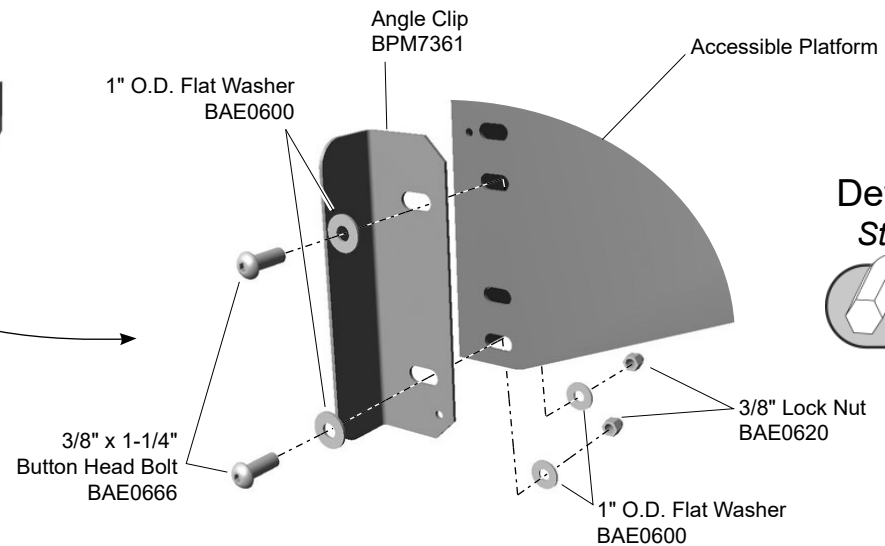
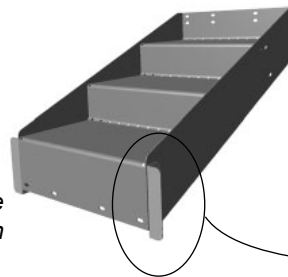
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 7.



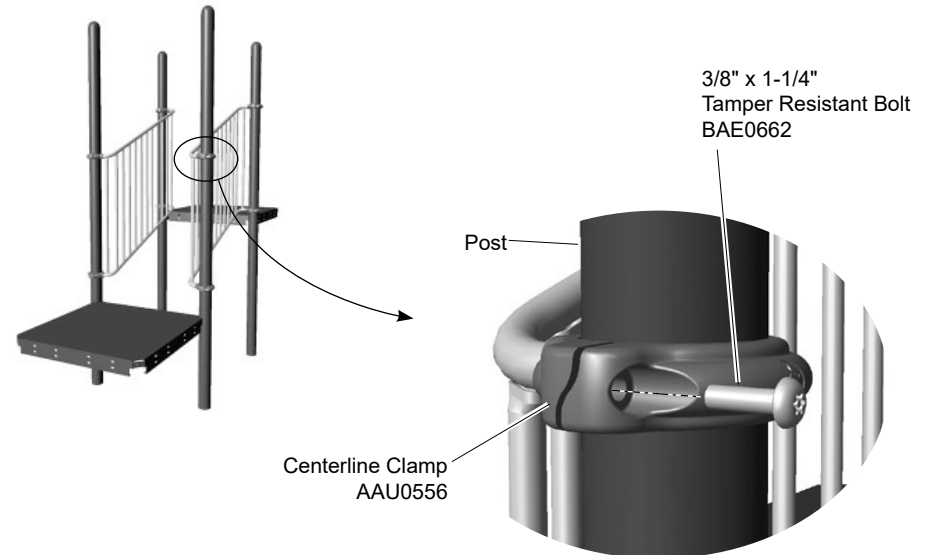
Detail A
Step 4

The front of angle clip should be even with the face of the platform



Detail C
Step 6

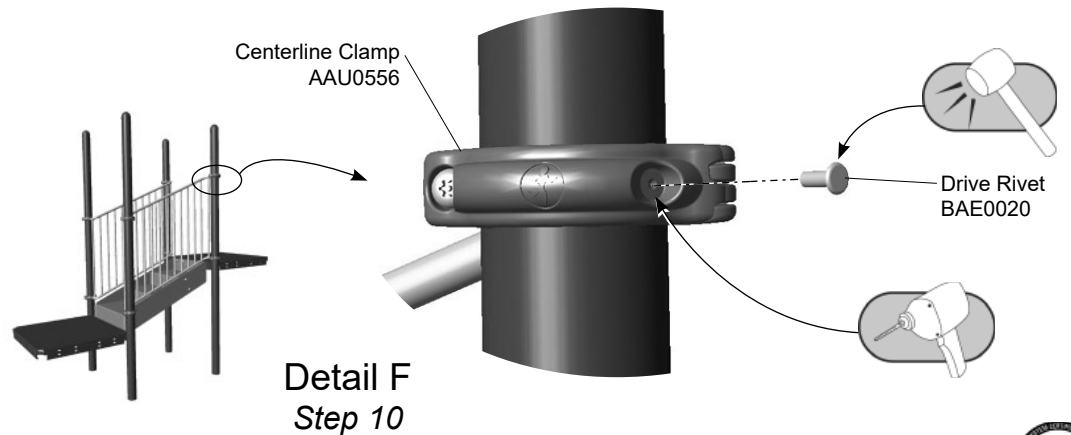
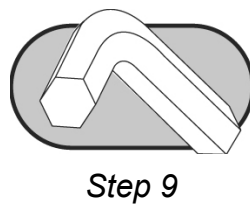
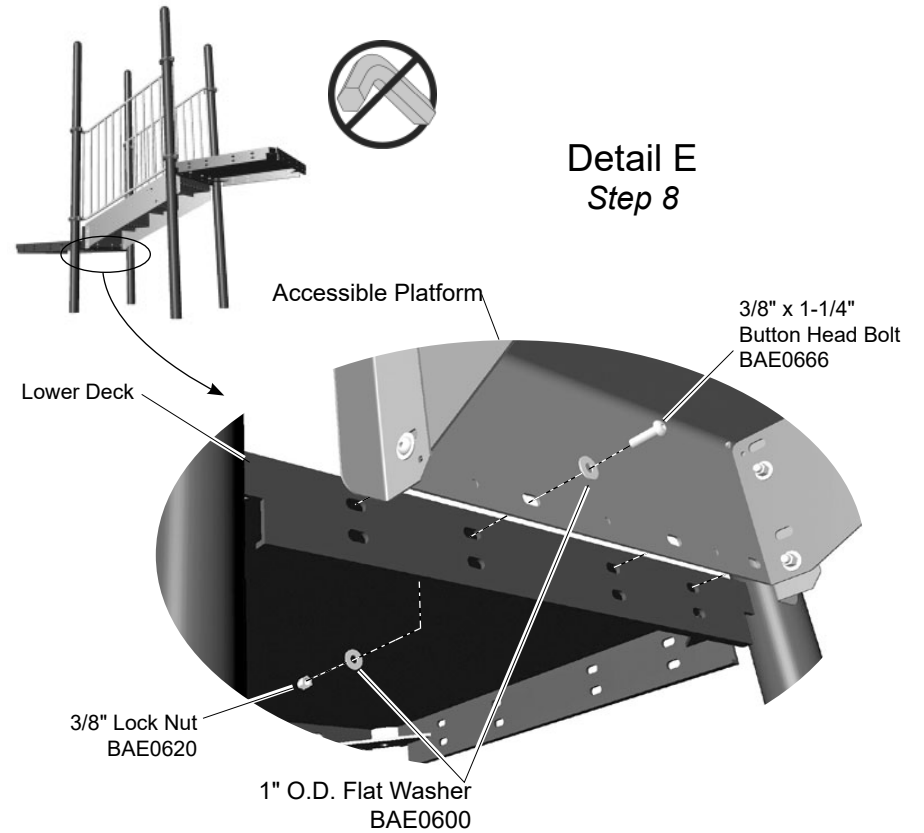
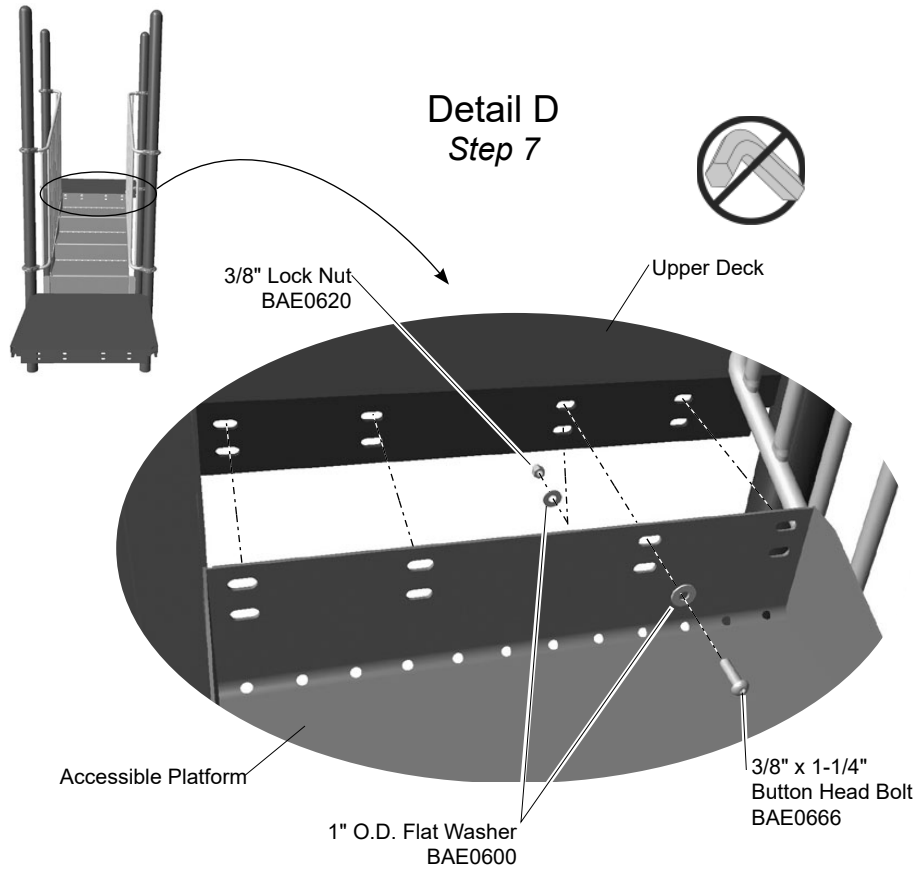
Model	Barriers (Right / Left)	Tiered Platform
ZZCH9168	AEN0479 / AEN0480	BPM0296
ZZCH9170	AEN0481 / AEN0482	BPM0298
ZZCH9177	AEN0483 / AEN0484	BPM0299



Detail B
Step 5



Installation Instructions



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Determine location of the platform by referring to the master layout drawing.

Step 4: Attach the clamps to the barriers. See **Detail A**. Select both barriers, the clamps, and the appropriate hardware. Attach a clamp to each of the ends of the barrier rails. There are (4) four clamp connections per barrier. Turn the clamps so that the hinges all face the same direction.

Step 5: Attach the barriers to the posts. See **Detail B**. Select both barriers and the tamper resistant bolts. Place the barriers between the posts, and attach as shown.

Step 6: Attach the angle clips to the accessible platform. See **Detail C**. Select both angle clips, the tiered platform, and the appropriate hardware. Place the angle clips against the lower side of the platform with the front faces aligned. Attach as shown.

Step 7: Attach the tiered platform to the upper deck. See **Detail D**. Select the tiered platform and the appropriate hardware. A brace will be necessary to support the weight until the lower connections are made. Place the platform between the decks and align the upper riser with the upper holes in the deck. Attach as shown. The upper edge of the step should not protrude above the edge of the deck.

Step 8: Attach the tiered platform to the lower deck. See **Detail E**. Select the appropriate hardware. Attach as shown.

Final Details.

Step 9: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts & Nuts - Snug tighten and tighten an additional one-half turn.

Step 10: Rivet the clamps to the posts. See **Detail F**. After the equipment assembly is complete, install a drive rivet in each clamp to permanently secure it to the support post. Using a 1/4" drill bit, drill through the clamp and support post. Insert the drive rivet into drilled hole until the head of the rivet is against the surface of the clamp. Using a hammer, pound the pin of the rivet until it is flush with the surface of the rivet head.

Note: This step should be executed after structure has been assembled and properly footed.

Bill of Materials

CH9168 - 12" (305 mm) DECK TO DECK ACCESSIBLE TIERED PLATFORM

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	8
AEN0479	BARRIER - 12" ACCESS STAIR PROTECT w/INSERTS (RT)	1
AEN0480	BARRIER - 12" ACCESS STAIR PROTECT w/INSERTS (LT)	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	8
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	24
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	12
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESIST w/TORX DRIVE	8
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	12
BPM0296	STAIR - 12" ACCESSIBLE	1
BPM7361	ACCESSIBLE STAIR ANGLE CLIP	2

CH9177 - 36" (610 mm) DECK TO DECK ACCESSIBLE TIERED PLATFORM

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	8
AEN0483	BARRIER - 36" ACCESS STAIR PROTECT w/INSERTS (RT)	1
AEN0484	BARRIER - 36" ACCESS STAIR PROTECT w/INSERTS (LT)	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	8
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	24
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	12
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESIST w/TORX DRIVE	8
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	12
BPM0299	STAIR - 36" ACCESSIBLE	1
BPM7361	ACCESSIBLE STAIR ANGLE CLIP	2

CH9170 - 24" (610 mm) DECK TO DECK ACCESSIBLE TIERED PLATFORM

PART NO.	DESCRIPTION	QTY.
AAU0556	CLAMP - 3-1/2" CENTERLINE DIE CAST	8
AEN0481	BARRIER - 24" ACCESS STAIR PROTECTIVE w/INS. (RT)	1
AEN0482	BARRIER - 24" ACCESS STAIR PROTECTIVE w/INS. (LT)	1
BAE0020	RIVET - 1/4" x 11/16" DRIVE	8
BAE0595	WASHER - 3/8" SAE FLAT	8
BAE0600	WASHER - 1" O.D. FLAT	24
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	12
BAE0662	BOLT - 3/8"-16 x 1-1/4" TAMPER RESIST w/TORX DRIVE	8
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	8
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	12
BPM0298	STAIR - 24" ACCESSIBLE	1
BPM7361	ACCESSIBLE STAIR ANGLE CLIP	2



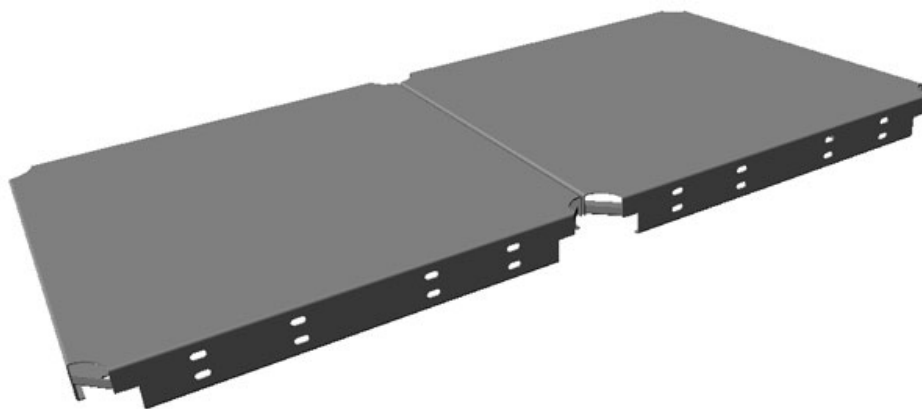
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Installation Instructions

Universal Model UN2290
Coated Deck to Deck Connecting Kit




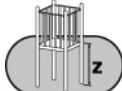

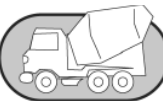
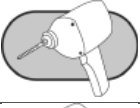


Assembly View

Installation Preparation

Recommended Crew: One (1) adult

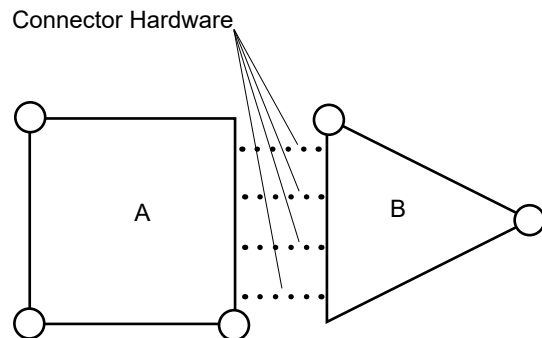
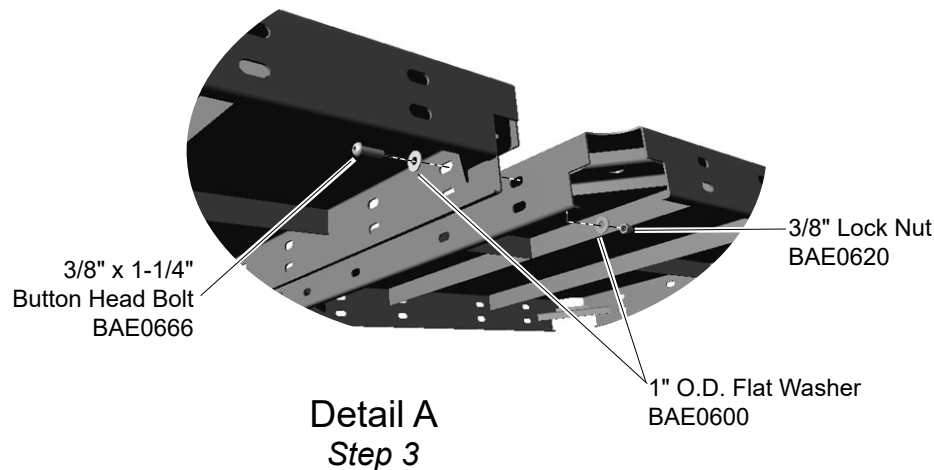
Installation Time: 0.25 hour

ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on this page.



Clamp Position - Adjacent Decks

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Important Note: When placing decks side by side at the same height there will be a clamp conflict. Place the clamps so that there will be adequate support for each deck.

(ex: square and tri decks- 3 clamps on the square deck and 2 clamps on the tri deck) The hardware below will make the connection secure. The open corner of a deck should always be resting on the adjacent deck's clamp. See **Clamp Position Detail** at lower left.

Connect the decks.

Step 3: Connect the decks. See **Detail A**. Select the existing decks and the appropriate hardware. There are (8) eight connections. Place the decks together to form the required deck configuration. Align the the (4) four holes in the side support of one deck with those of the second deck and attach as shown.

Final Details

Step 4: Check to ensure that the deck to deck connection is plumb and level. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

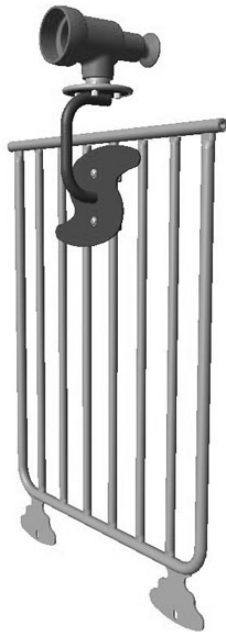
Bill of Materials

UN - COATED DECK TO DECK CONNECTING KIT

PART NO.	DESCRIPTION	QTY.
BAE0600	WASHER - 1" O.D. FLAT	8
BAE0620	NUT - 3/8"-16 LOCK w/ NYLON CAP	4
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD CAP	4

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Assembly View (representative model)

Model	Description
ZZUN4279	Pipe Wall Mount (CH/EX)
ZZUN4280	Pipe Wall Mount for (PM)
ZZUN4438	Pipe Wall Mount w/Lens (CH/EX)
ZZUN4439	Pipe Wall Mount w/Lens (PM)

Installation Instructions


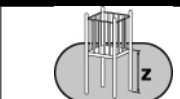




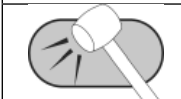
Universal Models UN4279, UN4280,
UN4438, & UN4439

Telescope Pipe Wall Mount (CH/EX) or (PM) &
Telescope Pipe Wall Mount w/ Lens (CH/EX) or (PM)

Installation Preparation

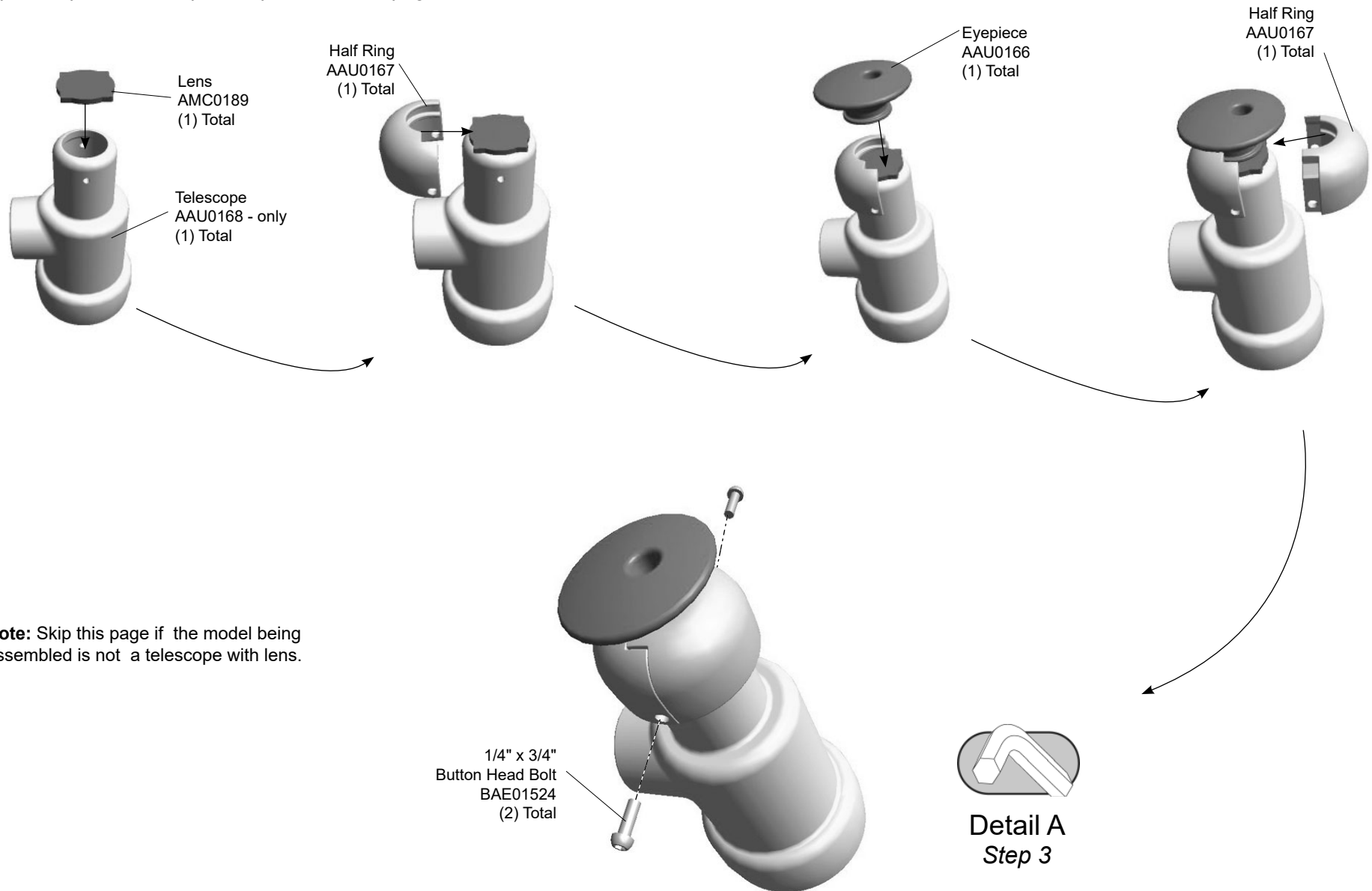
Recommended Crew: One (1) adult
 Installation Time: 0.5 hour
 Use Zone: Refer to Master Drawing
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

ICON KEY

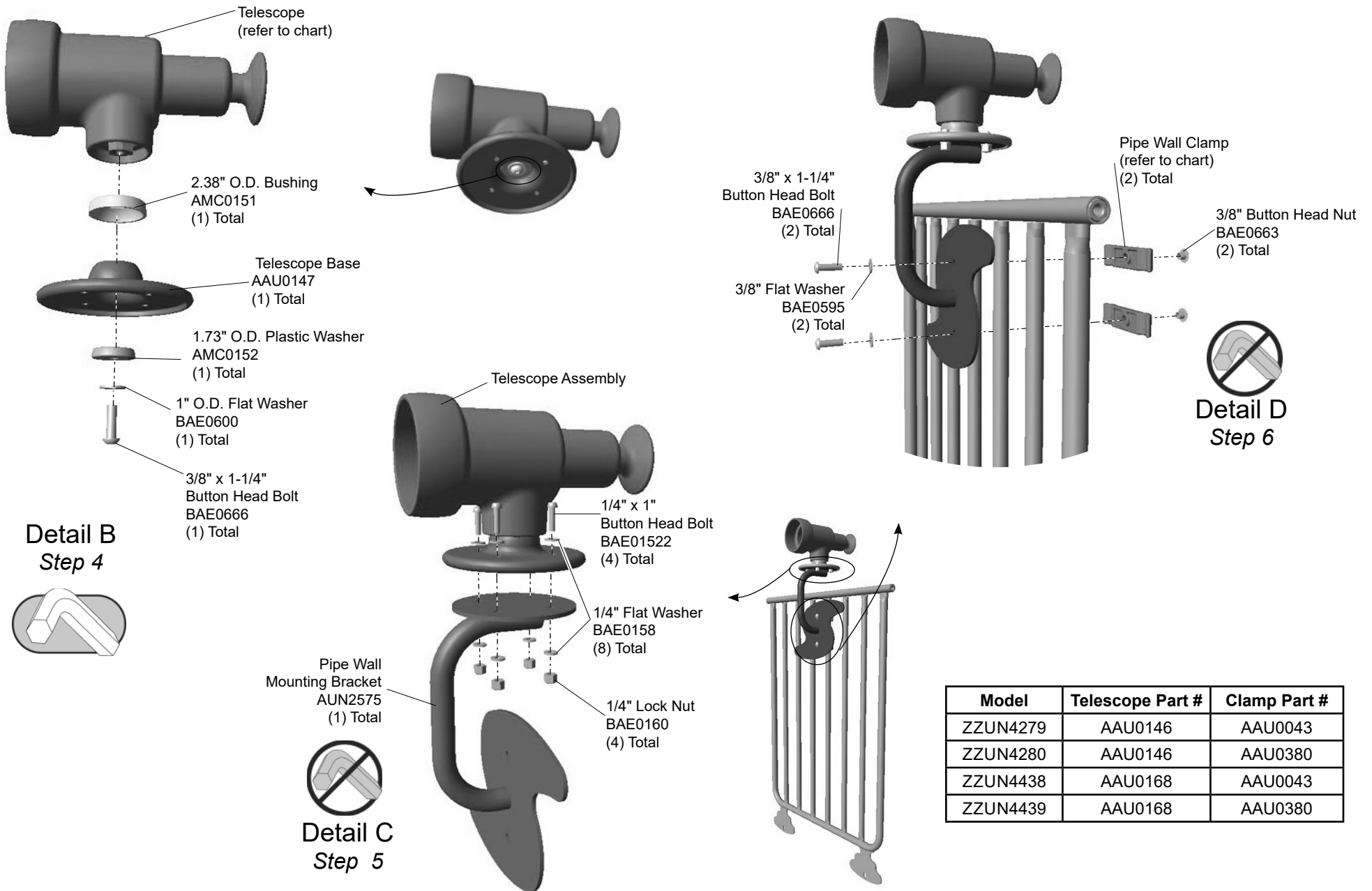
	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 4.



Installation Instructions



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Assemble the telescope. Note: *Skip this step if the model being assembled is not a telescope with a lens.* **See Detail A.** Attach as shown. Fully tighten the connections. The eyepiece should turn easily within the assembly.

Step 4: Attach the telescope to the base. **See Detail B.** Attach as shown. Fully tighten the connection.

Step 5: Attach the telescope to the mounting bracket. See **Detail C.** Attach as shown.

Step 6: Attach the bracket to the pipe wall barrier. See **Detail D.** Position the bracket on the proper side of the pipe wall barrier looking out from the structure. The telescope should extend above the pipe wall barrier with the eyepiece toward the deck. Attach as shown.

Final Details.

Step 7: Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Bill of Materials

UN4279 - TELESCOPE PIPE WALL MOUNT (CH/EX)

PART NO.	DESCRIPTION	QTY.
AAU0043	CLAMP - STEERING WHEEL FOR 4" CENTERS	2
AAU0146	CASTING - TELESCOPE BODY	1
AAU0147	CASTING - TELESCOPE BASE (FULL MOTION)	1
AMC0151	BUSHING - 2.38" O.D. x .50"	1
AMC0152	WASHER - 1.73" O.D. x .38" w/HOLE	1
AUN2575	BRACKET - PIPE WALL TELESCOPE MOUNT	1
BAE0158	WASHER - 1/4" SAE FLAT	8
BAE0160	NUT - 1/4"-20 HEAVY LOCK w/o NYLON CAP	4
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	1
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	2
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	3
BAE01522	BOLT - 1/4"-20 x 1" BUTTON HEAD - SS	4

UN4280 - TELESCOPE PIPE WALL MOUNT (PM)

PART NO.	DESCRIPTION	QTY.
AAU0146	CASTING - TELESCOPE BODY	1
AAU0147	CASTING - TELESCOPE BASE (FULL MOTION)	1
AAU0380	CLAMP - STEERING WHEEL	2
AMC0151	BUSHING - 2.38" O.D. x .50"	1
AMC0152	WASHER - 1.73" O.D. x .38" w/HOLE	1
AUN2575	BRACKET - PIPE WALL TELESCOPE MOUNT	1
BAE0158	WASHER - 1/4" SAE FLAT	8
BAE0160	NUT - 1/4"-20 HEAVY LOCK w/o NYLON CAP	4
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	1
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	2
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	3
BAE01522	BOLT - 1/4"-20 x 1" BUTTON HEAD - SS	4

UN4438 - TELESCOPE PIPE WALL MOUNT (CH/EX)

PART NO.	DESCRIPTION	QTY.
AAU0043	CLAMP - STEERING WHEEL FOR 4" CENTERS	2
AAU0147	CASTING - TELESCOPE BASE (FULL MOTION)	1
AAU0166	CASTING - EYEPIECE	1
AAU0167	CASTING - RING HALF	2
AAU0168	CASTING - TELESCOPE MACHINED	1
AMC0151	BUSHING - 2.38" O.D. x .50"	1
AMC0152	WASHER - 1.73" O.D. x .38" w/HOLE	1
AMC0189	SILKSCREENED LEXAN LENS	1
AUN2575	BRACKET - PIPE WALL TELESCOPE MOUNT	1
BAE0158	WASHER - 1/4" SAE FLAT	8
BAE0160	NUT - 1/4"-20 HEAVY LOCK w/o NYLON CAP	4
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	1
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	2
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	3
BAE01522	BOLT - 1/4"-20 x 1" BUTTON HEAD - SS	4
BAE01524	BOLT - 1/4"-20 x 3/4" BUTTON HEAD - SS	2

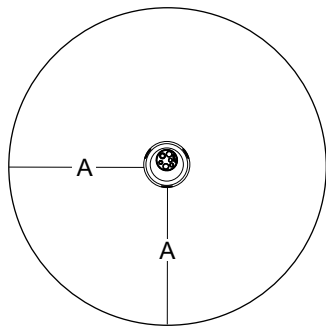
UN4439 - TELESCOPE PIPE WALL MOUNT (PM)

PART NO.	DESCRIPTION	QTY.
AAU0147	CASTING - TELESCOPE BASE (FULL MOTION)	1
AAU0166	CASTING - EYEPIECE	1
AAU0167	CASTING - RING HALF	2
AAU0168	CASTING - TELESCOPE MACHINED	1
AAU0380	CLAMP - STEERING WHEEL	2
AMC0151	BUSHING - 2.38" O.D. x .50"	1
AMC0152	WASHER - 1.73" O.D. x .38" w/HOLE	1
AMC0189	SILKSCREENED LEXAN LENS	1
AUN2575	BRACKET - PIPE WALL TELESCOPE MOUNT	1
BAE0158	WASHER - 1/4" SAE FLAT	8
BAE0160	NUT - 1/4"-20 HEAVY LOCK w/o NYLON CAP	4
BAE0595	WASHER - 3/8" SAE FLAT	2
BAE0600	WASHER - 1" O.D. FLAT	1
BAE0663	NUT - 3/8"-16 x 7/16" BUTTON HEAD	2
BAE0666	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD - SS	3
BAE01522	BOLT - 1/4"-20 x 1" BUTTON HEAD - SS	4
BAE01524	BOLT - 1/4"-20 x 3/4" BUTTON HEAD - SS	2





Assembly View (representative model)



Equipment Use Zone
A - (ASTM) 72 in. (1830 mm)
(CSA) 1800 mm
(EN) 1500 mm

Installation Instructions


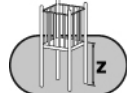

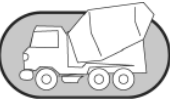


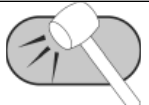
Universal Models UN7136 and UN7136S

Unity Stepper (Small)

In-Ground and Surface Mount

Installation Preparation

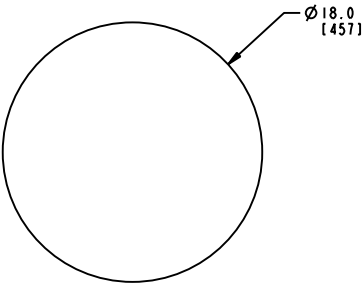
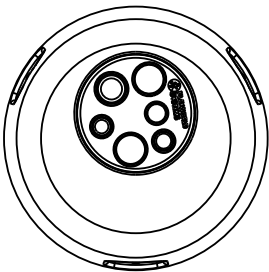
Recommended Crew: Two (2) adults
Installation Time (in-ground): 1 man-hour
Installation Time (surface mount): 0.5 man-hour
Concrete Required: 0.13 cubic yard (0,10 cubic meters)
Use Zone: Refer to the information below
User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

ICON KEY			
	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

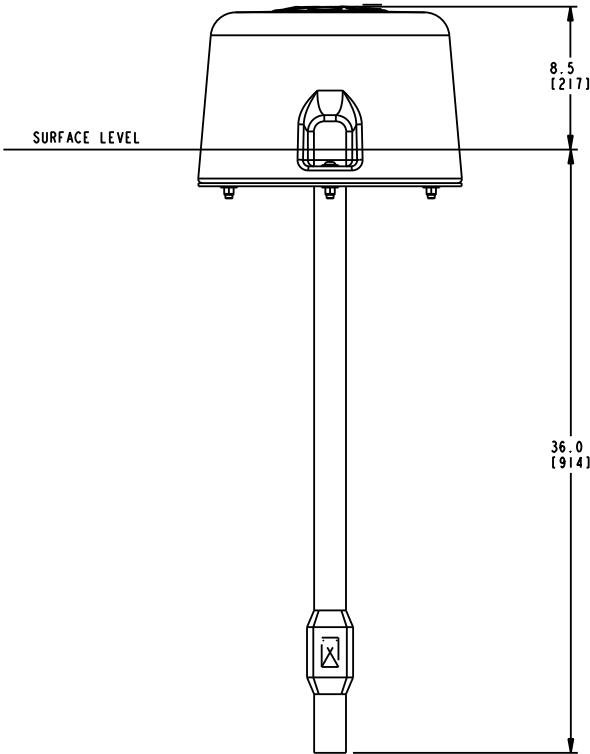
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

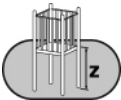
Top View



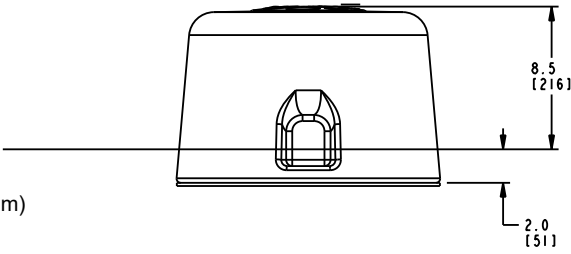
Footring Diagram



Elevation Views
UN7136



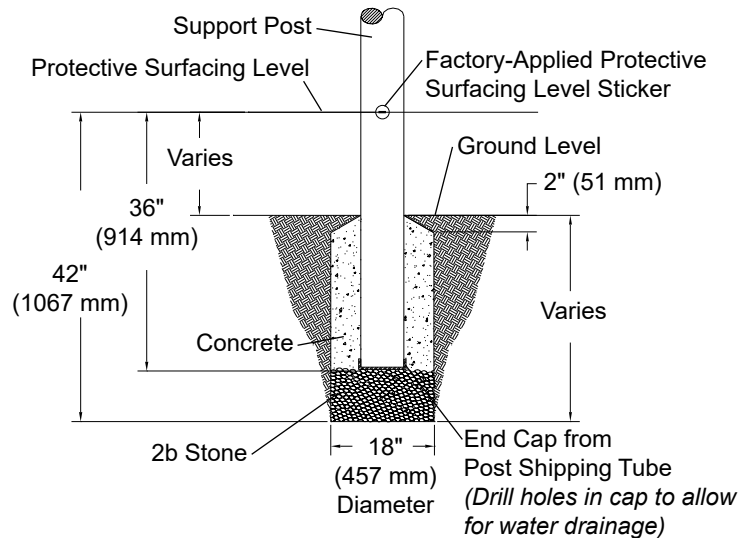
ASTM/CSA: 8.5" (217 mm)
EN: 217 mm



Elevation Views
UN7136S



Installation Instructions



Support Post Footing Detail (ASTM/CSA)

FOOTING NOTES

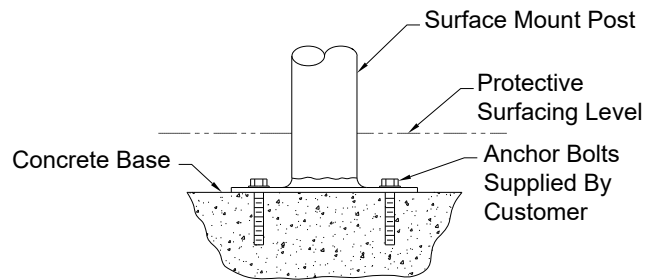
- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete.

Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).

GroundZero® posts are footed 12 in. (305 mm) deeper than the regular support posts, and will be marked as such on the master footing diagram.

- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

Installation Instructions



Surface Mount Footing Detail

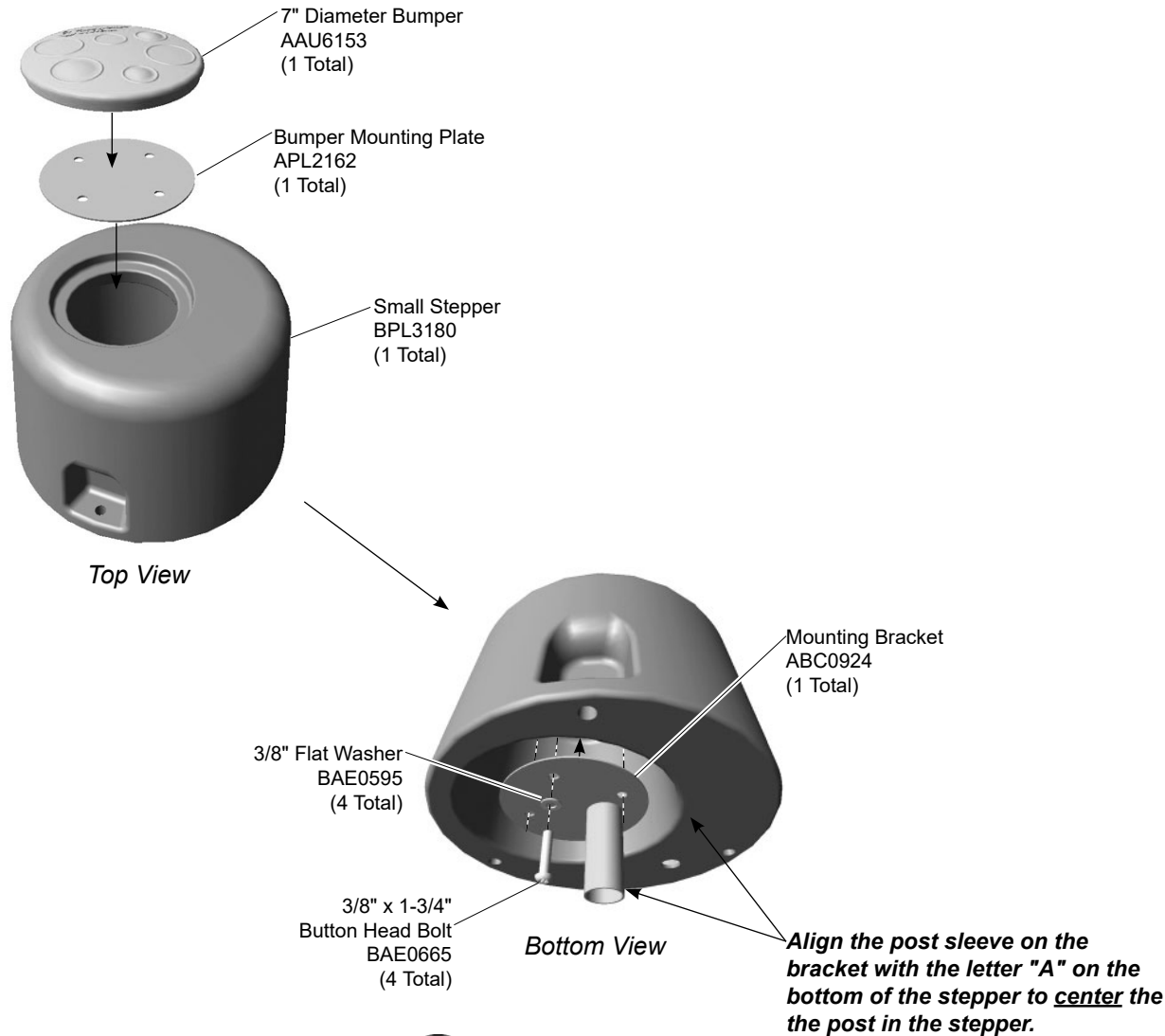
FOOTING NOTES

- All support posts and component support legs may have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Footing size may vary due to local soil and weather conditions.
- Base of footing must be below frost line.
- Comparison of protective surfacing materials is available in [Handbook for Public Playground Safety](#) published by U. S. Consumer Product Safety Commission.

Surface mount hardware is not supplied. Customer is responsible for concrete base and providing surface mount hardware as specified by a registered structural engineer for each specific project application.

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 7.



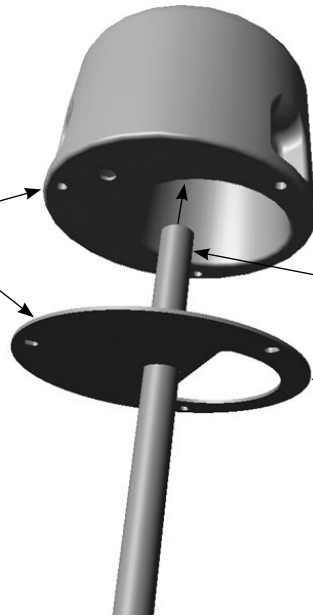
Detail A
Step 4



Assemble the stepper.

Installation Instructions

Important Note: The wide part of the anchor plate must align with the wide portion of the stepper. Ensure the holes in both are also aligned. Then fully tighten the connections made in Step 4.

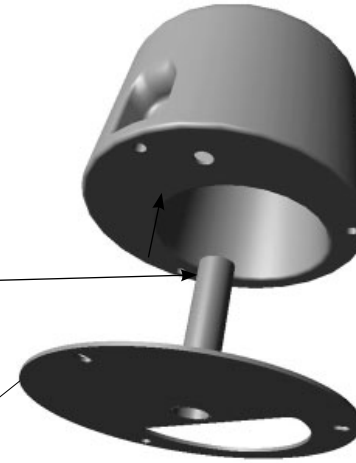


In-Ground Model

Insert over the post sleeve on the mounting bracket.

Anchor Post
APT5254
(1 Total)

Anchor Bracket
APT5299
(1 Total)



Surface Mount Model

Detail B Step 5



Position the anchor post/bracket inside the stepper.



3/8" x 1-3/4"
Button Head Bolt
BAE0665
(3 Total)

1" O.D. Flat Washer
BAE0600
(6 Total)

3/8" Lock Nut
BAE0620
(3 Total)

Detail C Step 6



*(In-Ground Model Only)
Attach the anchor post to the stepper.*

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate, or prepare, the footings as shown in the **Support Post Footing Detail or Surface Mount Footing Detail** on pages 3 and 4 of this installation document.

Step 4: Assemble the stepper. See **Detail A**. Place the bumper and bumper mounting plate on top of the stepper. From underneath the stepper, insert the mounting bracket up into the stepper and align with the holes in the bumper and bumper mounting plate. **Ensure the post sleeve on the bracket is aligned with the letter "A" in the bottom of the stepper.**

Step 5: Position the anchor post/bracket inside the stepper. See **Detail B**. Insert the sleeve on the anchor post/bracket over the post sleeve on the mounting bracket with the wide part of the anchor plate aligned with the wide portion of the stepper. Align the holes in the anchor plate with the holes in the stepper and then fully tighten the connections made in **Step 4**. Fully tighten the connections according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 6: *(In-Ground Model Only)* Attach the anchor post to the stepper. See **Detail C**. Attach as shown in the detail. Fully tighten the connections according to tightening torque specifications.

Final Details.

Step 7: Place the stepper in, or on, its footing and plumb and level.

In-Ground: Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Surface Mount: Bolt down all surface mount supports in accordance with specifications provided by your registered structural engineer.

Important Note: Surface mount hardware is not supplied. Customer is responsible for concrete base and for providing surface mount hardware as specified by a registered structural engineer for each specific project application.

Step 8: For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the component where it can be visible.

UN7136 - UNITY STEPPER (SMALL)

PART NO.	DESCRIPTION	QTY.
AAU6153	BUMPER - 7.00" DIA INSERT	1
ABC0924	BRACKET - 6.69" DIA x 4.08"	1
APL2162	PLATE - 6.69" x 14 GA. w/ 4 HOLES	1
APT5254	POST - 15.70" x 15.70" x 42.18" SMALL	1
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0600	WASHER - 1" O.D. FLAT	6
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	3
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	7
BAE0922	TOOL - TT 45 L WRENCH	1
BPL3180	SOFT ROCK - SMALL	1
ALB0025	LABEL - AGE APPROPRIATE SHEET	1

UN7136S - UNITY STEPPER (SMALL) SM

PART NO.	DESCRIPTION	QTY.
AAU6153	BUMPER - 7.00" DIA INSERT	1
ABC0924	BRACKET - 6.69" DIA x 4.08"	1
APL2162	PLATE - 6.69" x 14 GA. w/ 4 HOLES	1
APT5299	POST - 15.70" x 15.70" x 8.00" SMALL (SM)	1
BAE0595	WASHER - 3/8" SAE FLAT	4
BAE0665	BOLT - 3/8"-16 x 1-3/4" BUTTON HEAD - SS	4
BAE0922	TOOL - TT 45 L WRENCH	1
BPL3180	SOFT ROCK - SMALL	1
ALB0025	LABEL - AGE APPROPRIATE SHEET	1



The world needs play.

For Customer Service, Call
800-233-8404 or
570-522-9800 OUTSIDE U.S.
1000 Buffalo Road • Lewisburg, PA 17837
www.playworldsystems.com

Fasteners

- Inspect for loose fasteners. Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Plastic Parts

- Inspect all plastic surfaces for sharp points, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed. Minor burrs or sharp edges may be removed by using a sharp utility knife or block plane to remove sharp burr.

Welds

- Inspect all welded joints. If any broken welds are detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Footings

- Inspect component to be solid in footing and secure. If any damage is detected, barricade equipment to prevent use until repair is completed.

Surfacing

- Raking loose-fill surfacing material back into dug out and displaced areas is necessary at frequent intervals to maintain the impact absorption qualities.
- Loose-fill materials must be replenished when the surface level drops below the minimum level to maintain proper depth in accordance with your equipment's critical fall height.
- Eliminate areas of standing water by improving site drainage.
- Contact manufacturer of unitary surfacing material for specific instructions and product to use for cleaning spots and stains.
- Contact manufacturer of unitary surfacing material if rips, tears or missing material is noticed. Follow the manufacturer instructions regarding the appropriate actions necessary for the repair.

Labels

- Inspect all applied labels to ensure labels are secure, not faded or damaged. Contact your local representative if replacement labels are needed.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance

Universal Models UN7136 and
UN7136S

Unity Stepper (Small)
In-Ground and Surface Mount



Inspection Form

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST

	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect plastic parts for damage.	Medium			
Inspect surfacing to insure proper depth and distribution.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			
Inspect footing to insure support is secure and footing is not damaged.	Low			

Inspection Codes
P = Pass **F** = Fail
NA = Not Applicable

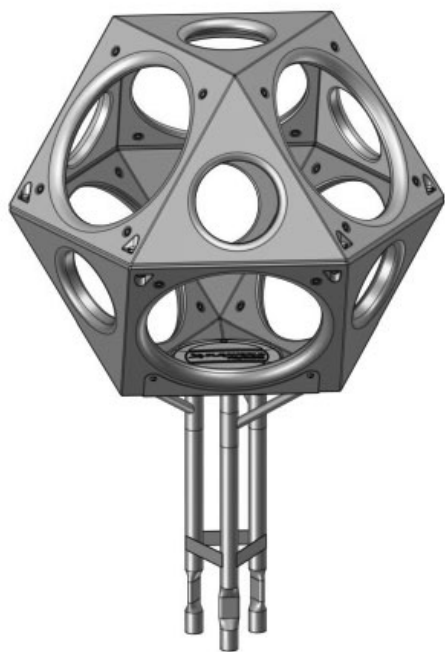
Inspector: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___

MAINTENANCE SCHEDULE

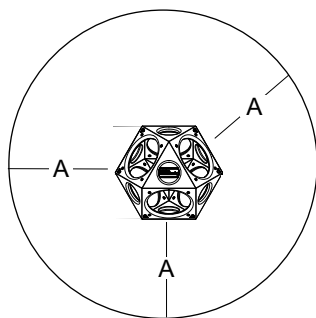
Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___





Assembly View (representative model)



Equipment Use Zone
 A - (ASTM) 72 in. (1830 mm)
 (CSA) 1800 mm
 (EN) 1500 mm

Installation Instructions

Universal Models UN8727 and UN8727S

Ground Level PlayCube

In-Ground and Surface Mount

Installation Preparation

Recommended Crew: Two (2) adults
 Installation Time (In-Ground): 1.5 man-hours
 Installation Time (Surface Mount): 1 man-hour
 Concrete Required: 0.12 cubic yard (0,09 cubic meters)
 Use Zone: See the master layout drawing
 User Group Age (single cube): ASTM/CSA: 2-12, EN: 2-14
 User Group Age (multiple cubes): ASTM/CSA: 5-12, EN: 6-14

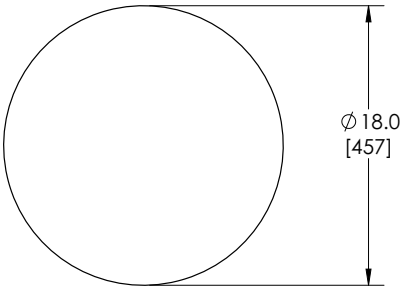
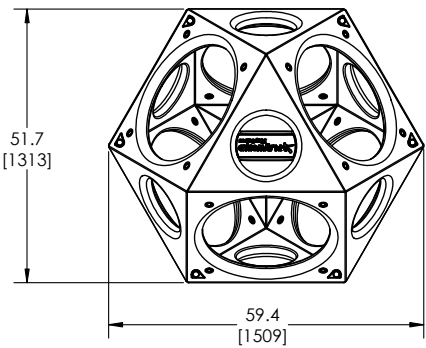
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

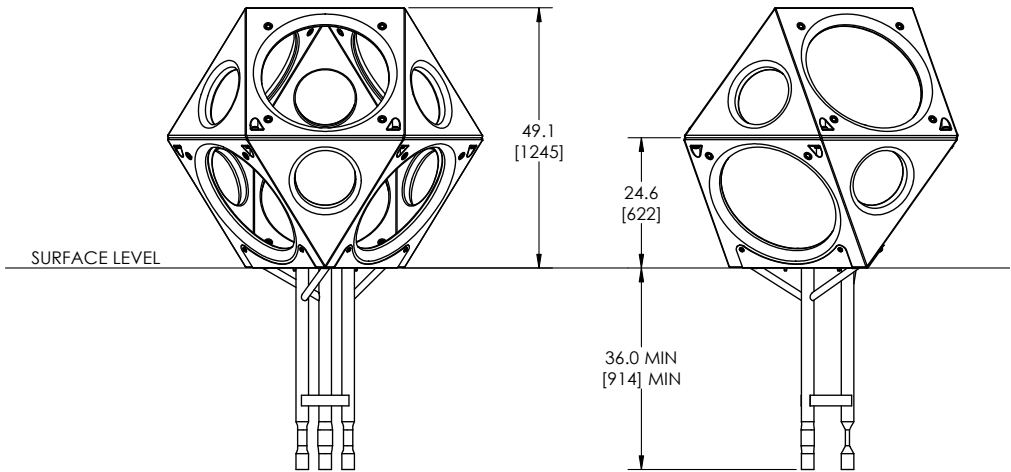
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

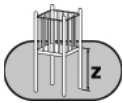
Top View



Footing Diagram



Elevation Views
UN8727

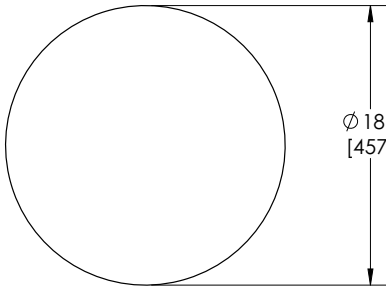


49" (1245 mm)
Footed as shown

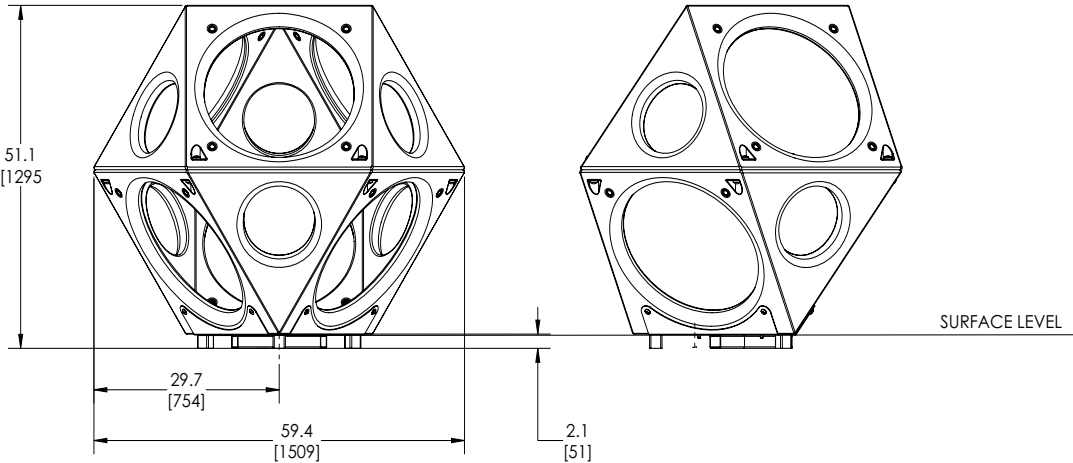
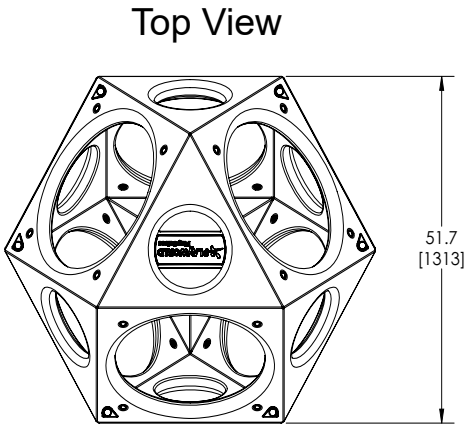


Installation Instructions

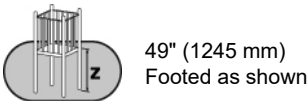
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



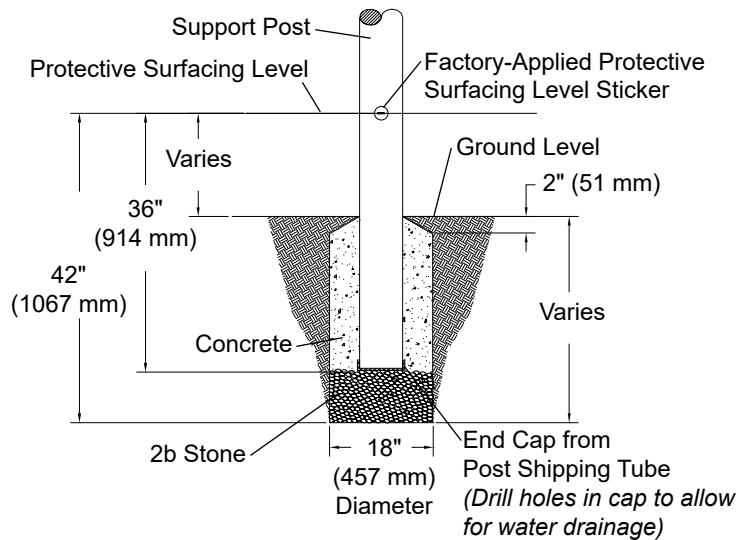
Footing Diagram



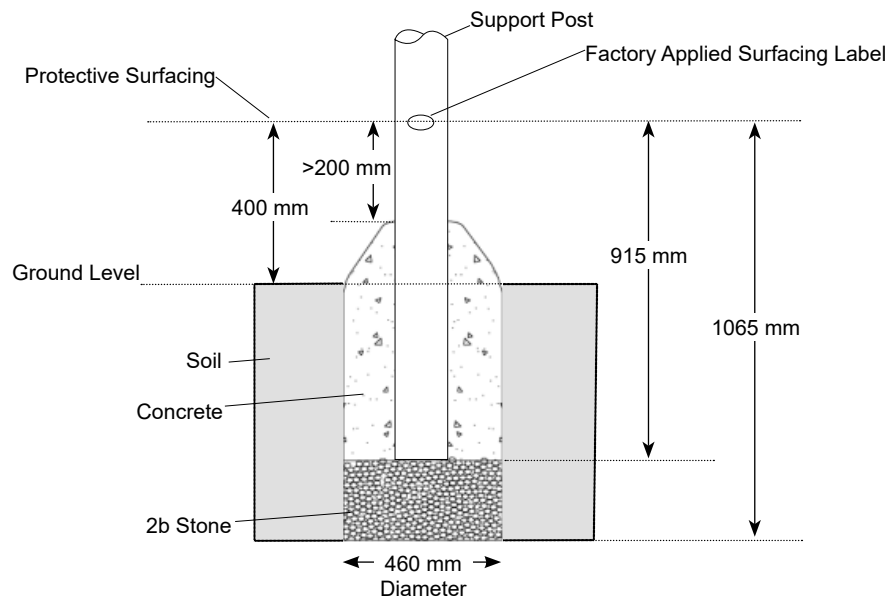
Elevation Views
UN8727S



Installation Instructions



Support Post Footing Detail (ASTM/CSA)



Footing Detail Support Post (EN)

FOOTING NOTES

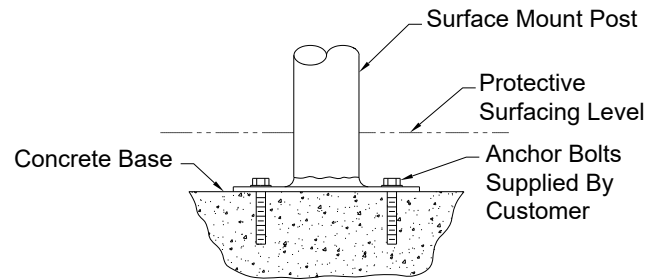
- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete.

Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).

GroundZero® posts are footed 12 in. (305 mm) deeper than the regular support posts, and will be marked as such on the master footing diagram.

- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

Installation Instructions



Surface Mount Footing Detail

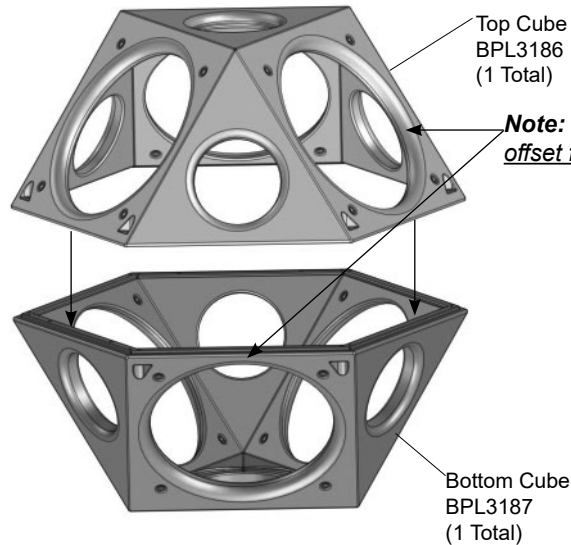
FOOTING NOTES

- All support posts and component support legs may have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Footing size may vary due to local soil and weather conditions.
- Base of footing must be below frost line.
- Comparison of protective surfacing materials is available in [Handbook for Public Playground Safety](#) published by U. S. Consumer Product Safety Commission.

Surface mount hardware is not supplied. Customer is responsible for concrete base and providing surface mount hardware as specified by a registered structural engineer for each specific project application.

Installation Instructions

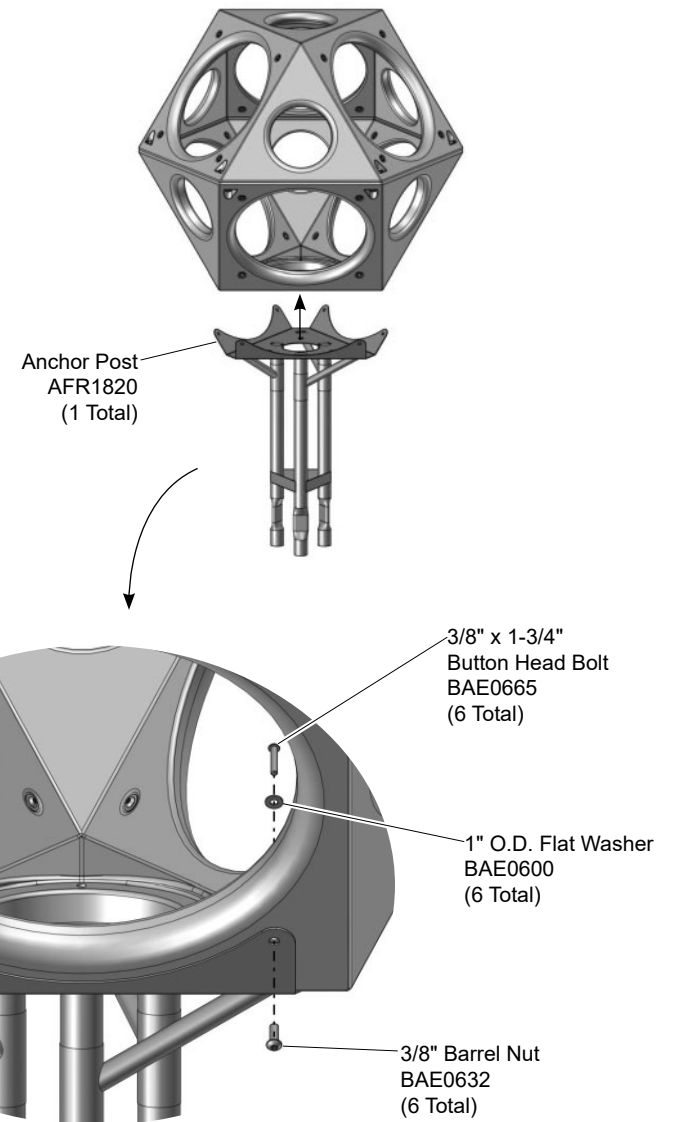
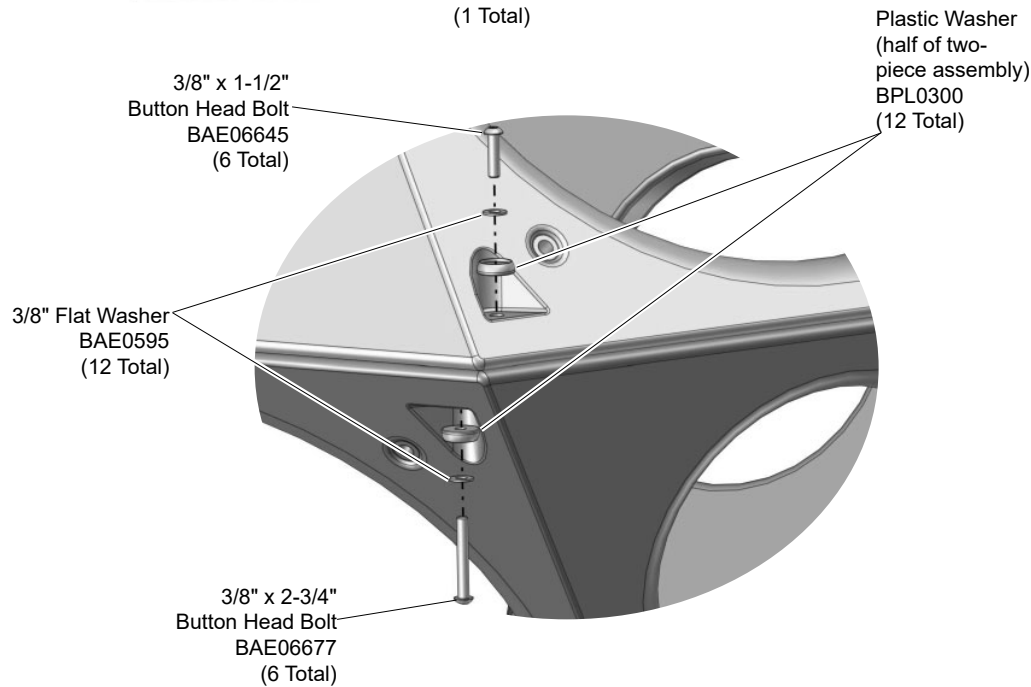
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 10.



Note: Large holes in the cubes are offset from each other.

Detail A Step 4

Attach the top cube to the bottom cube.



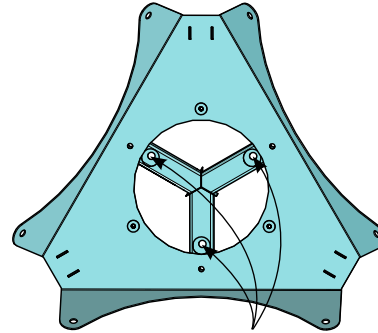
Detail B Step 5

(In-Ground Model)

Attach the anchor post to the bottom cube.

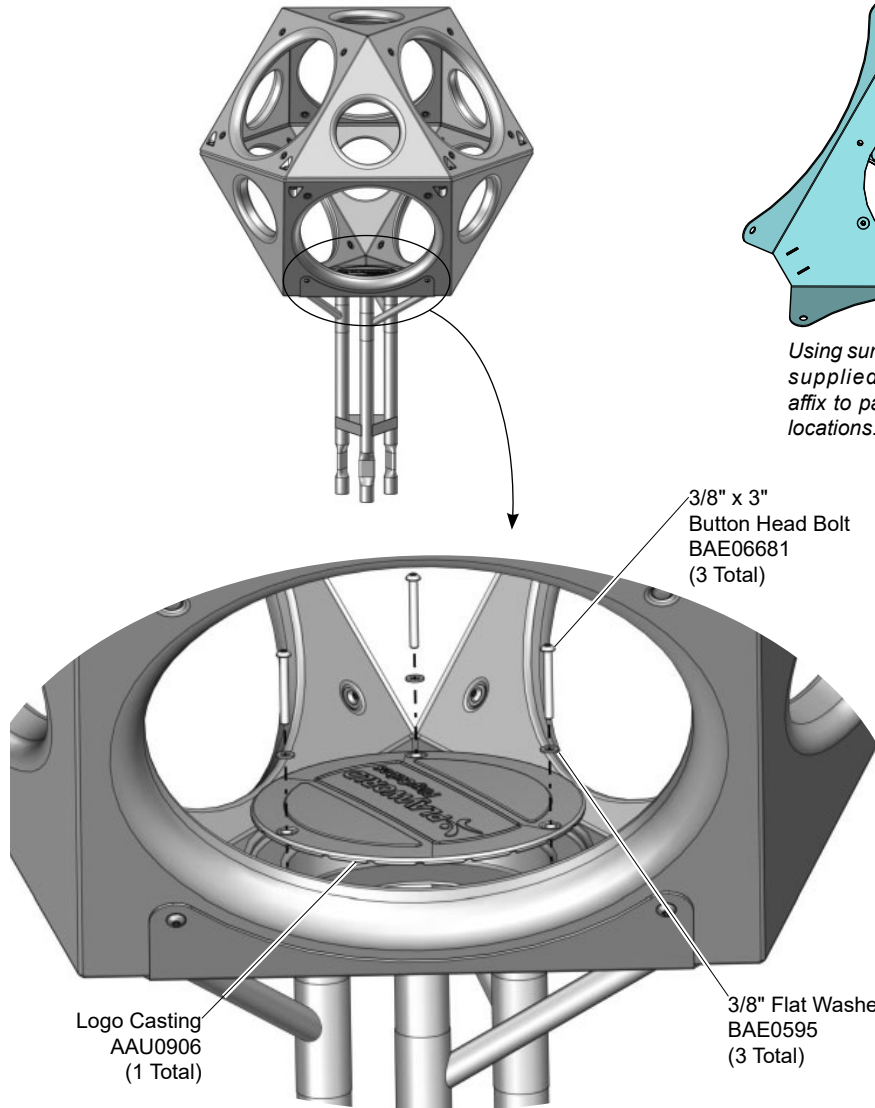
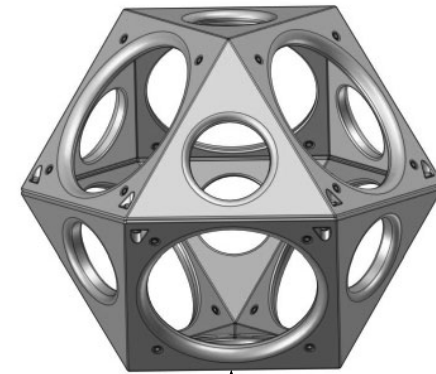
Installation Instructions

Top View of AFR1874



Using surface mount hardware supplied by the customer, affix to pad at the three footer locations.

Anchor Frame
AFR1874
(1 Total)



Logo Casting
AAU0906
(1 Total)

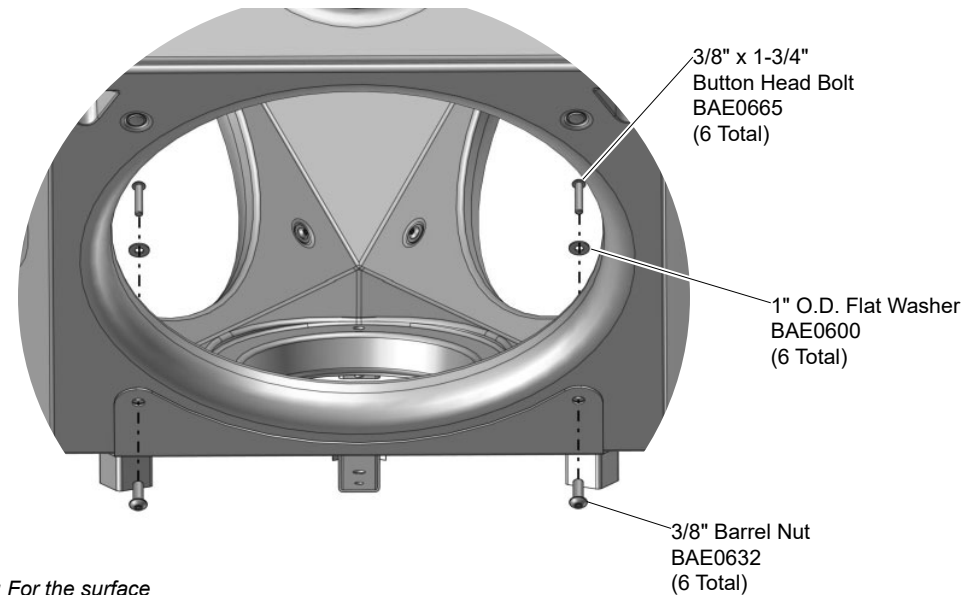
Detail C
Step 6



(In-Ground Model)

Attach the logo casting to the bottom cube.

Note: For the surface mount model do not attach the logo casting until the component has been secured on its footing.

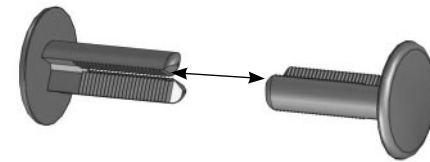
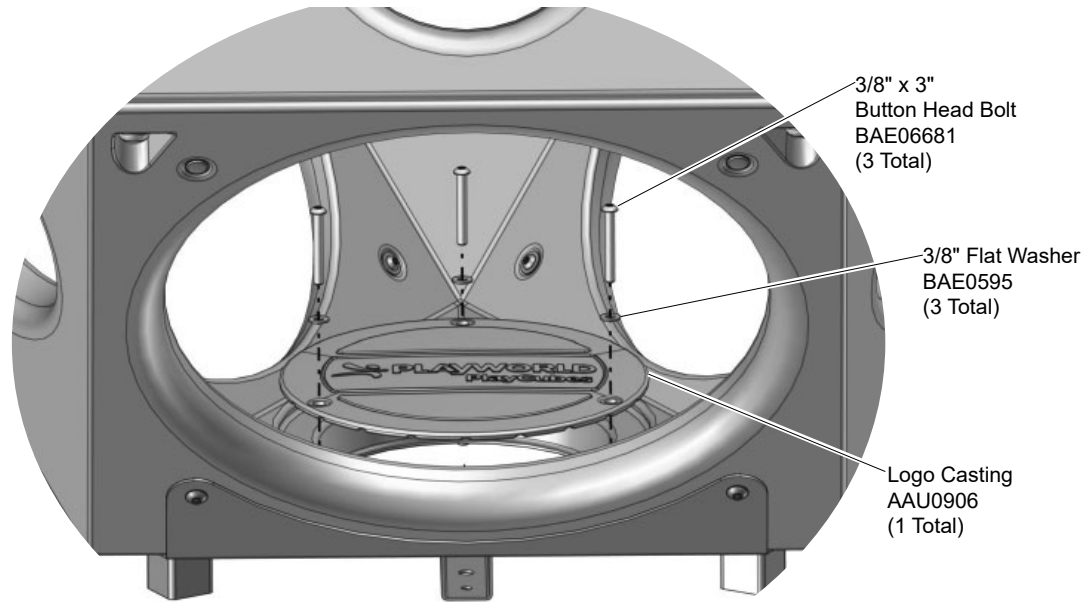


Detail D
Step 7

(Surface Mount Model)

Attach the anchor frame to the bottom cube.

Installation Instructions

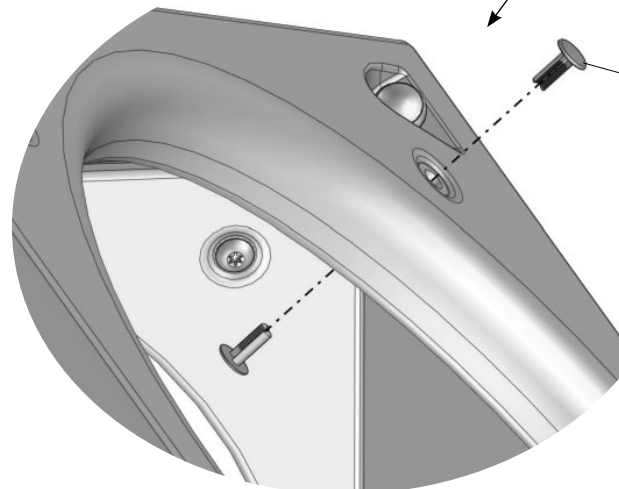
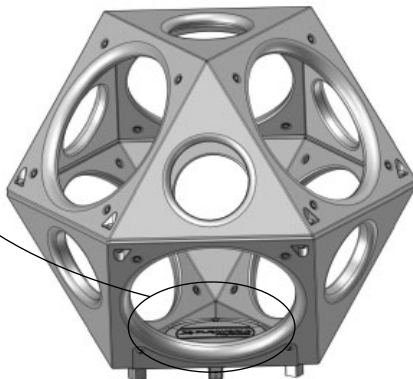


Align rivets as shown so they interlock.

Detail E Step 9



(Surface Mount Model)
Attach the logo casting to the bottom cube.

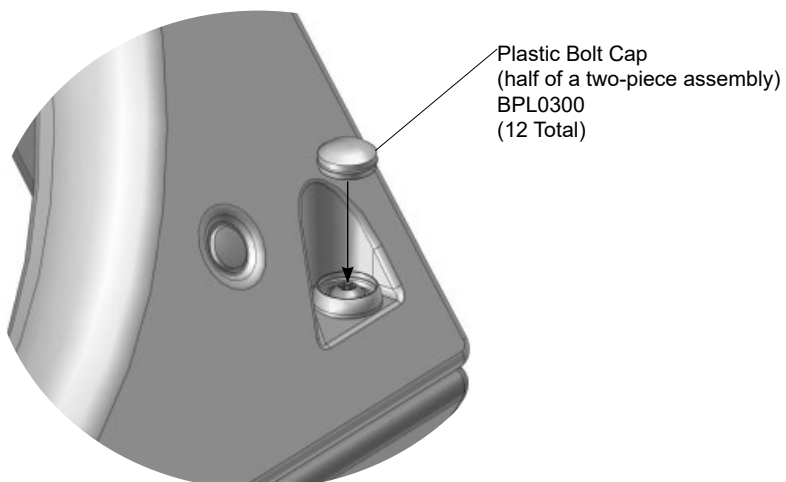


Ratchet Rivet
BPL3194
(28 Total if attaching to another cube)
(36 Total if not attaching to another cube)

Detail F Step 10

Fill in the unused holes **inside** and **outside** the ground level cube.

Installation Instructions



Detail G

Step 11

Insert the bolt caps into the plastic washers.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete. Do not install bolt caps until the structure is completely assembled and properly footed.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate, or prepare, the footings as shown in the **Support Post Footing Details or Surface Mount Footing Detail** on pages 4 and 5 of this installation document.

Step 4: Attach the top cube to the bottom cube. See **Detail A**. Place the top cube onto the bottom cube making sure the large holes are offset and attach as shown. Fully tighten the connections according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Note: Steps 5 and 6 refer only to the in-ground model.

Step 5: Attach the anchor post to the bottom cube. See **Detail B**. Position the top of the anchor post against the bottom of the cube assembly and attach as shown. Fully tighten the connections according to tightening torque specifications.

Step 6: Attach the logo casting to the bottom cube. See **Detail C**. Place the casting on the inside bottom of the cube assembly and attach as shown.

Note: Step 7 refers only to the surface mount model.

Step 7: Attach the anchor frame to the bottom cube. See **Detail D**. Position the top of the anchor frame against the bottom of the cube assembly and attach as shown.

Final Details.

Step 8: Finish assembling the structure. Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

In-Ground: Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Surface Mount: Bolt down all surface mount supports in accordance with specifications provided by your registered structural engineer.

Important Note: Surface mount hardware is not supplied. Customer is responsible for concrete base and for providing surface mount hardware as specified by a registered structural engineer for each specific project application.

Hardware Note: Extra hardware is provided for attachment of an above ground PlayCube.

Step 9: Attach the logo casting to the bottom cube. See **Detail E**. Place the casting on the inside bottom of the cube assembly and attach as shown. Fully tighten the connections according to tightening torque specifications.

Step 10: Fill in the unused **inside** and **outside** holes in the ground level cube. See **Detail F**. After the equipment assembly is complete, install a ratchet rivet in each unused open hole in the cube. Insert the rivet into the hole and press in place. Make sure to insert the rivets so they interlock as shown in the reference.
Note: This step should be executed after structure has been assembled and properly footed.

Step 11: Insert the bolt caps into the plastic washers. See **Detail G**. Select the plastic caps and press over the plastic flanged washers.

Note: The plastic caps install easier when they are warm.

Step 12: For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the component at eye level.

Bill of Materials

UN8727 - GROUND LEVEL PLAYCUBE

PART NO.	DESCRIPTION	QTY.
AAU0906	CASTING - PLAYCUBES LOGO	1
AFR1820	POST - 32.48" x 28.44" x 42.28	1
BAE0595	WASHER - 3/8" SAE FLAT	15
BAE0600	WASHER - 1" O.D. FLAT	6
BAE0632	NUT - 3/8"-16 x 1.25 BARREL w/PATCH	6
BAE0665	BOLT - 3/8"-16 x 1.75" BUTTON HEAD - SS	6
BAE0922	TOOL - TT 45 L WRENCH	2
BAE06645	BOLT - 3/8"-16 x 1.50" BUTTON HEAD - SS	6
BAE06677	BOLT - 3/8"-16 x 2.75" BUTTON HEAD - SS	6
BAE06681	BOLT - 3/8"-16 x 3.00" BUTTON HEAD - SS	3
BPL0300	CAP - 3/8" BOLT	12
BPL3186	PLAYCUBES - TOP CUBE	1
BPL3187	PLAYCUBES - BOTTOM CUBE	1
BPL3194	RIVET - RATCHET - .88" O.D. x 1.67"	36
ALB0025	LABEL - AGE APPROPRIATE SHEET	1

UN8727S - GROUND LEVEL PLAYCUBE SURFACE MOUNT

PART NO.	DESCRIPTION	QTY.
AAU0906	CASTING - PLAYCUBES LOGO	1
AFR1874	FRAME - 32.48" x 28.67" x 6.35"	1
BAE0595	WASHER - 3/8" SAE FLAT	15
BAE0600	WASHER - 1" O.D. FLAT	6
BAE0632	NUT - 3/8"-16 x 1.25 BARREL w/PATCH	6
BAE0665	BOLT - 3/8"-16 x 1.75" BUTTON HEAD - SS	6
BAE0922	TOOL - TT 45 L WRENCH	2
BAE06645	BOLT - 3/8"-16 x 1.50" BUTTON HEAD - SS	6
BAE06677	BOLT - 3/8"-16 x 2.75" BUTTON HEAD - SS	6
BAE06681	BOLT - 3/8"-16 x 3.00" BUTTON HEAD - SS	3
BPL0300	CAP - 3/8" BOLT	12
BPL3186	PLAYCUBES - TOP CUBE	1
BPL3187	PLAYCUBES - BOTTOM CUBE	1
BPL3194	RIVET - RATCHET - .88" O.D. x 1.67"	36
ALB0025	LABEL - AGE APPROPRIATE SHEET	1



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800-233-8404 or
570-522-9800 OUTSIDE U.S.
 1000 Buffalo Road • Lewisburg, PA 17837
www.playworldsystems.com

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Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Plastic Parts

- Inspect all plastic surfaces for sharp points, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed. Minor burrs or sharp edges may be removed by using a sharp utility knife or block plane to remove sharp burr.

Castings

- Inspect the aluminum castings to insure they are properly secured to the component.
- Visually inspect the castings for cracks or breakage. If any damage is detected, barricade the equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Welds

- Inspect all welded joints. If any broken welds are detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Footings

- Inspect component to be solid in, or on, the footing and secure. If any damage is detected, barricade equipment to prevent use until repair is completed.

Surfacing

- Raking loose-fill surfacing material back into dug out and displaced areas is necessary at frequent intervals to maintain the impact absorption qualities.
- Loose-fill materials must be replenished when the surface level drops below the minimum level to maintain proper depth in accordance with your equipment's critical fall height.
- Eliminate areas of standing water by improving site drainage.
- Contact manufacturer of unitary surfacing material for specific instructions and product to use for cleaning spots and stains.
- Contact manufacturer of unitary surfacing material if rips, tears or missing material is noticed. Follow the manufacturer instructions regarding the appropriate actions necessary for the repair.

Labels

- Inspect all applied labels to ensure labels are secure, not faded or damaged. Contact your local representative if replacement labels are needed.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

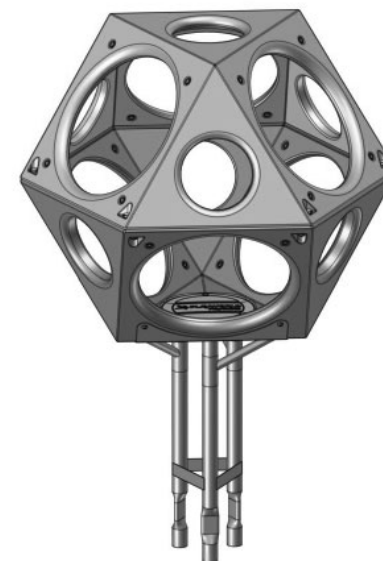
Equipment Maintenance

Universal

Models UN8727 and UN8727S

Ground Level PlayCube

In-Ground and Surface Mount



Inspection Form

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST

	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect plastic parts for damage.	Medium			
Inspect surfacing to insure proper depth and distribution.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			
Inspect footing to insure support is secure and footing is not damaged.	Low			

Inspection Codes	
P = Pass	F = Fail
NA = Not Applicable	

Inspector: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___

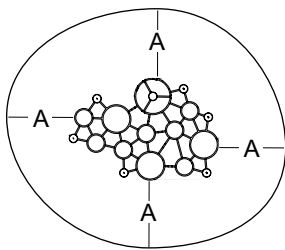
MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___



Assembly View (representative structure)



Equipment Use Zone
A - (ASTM) 72 in. (1830 mm)
(CSA) 1800 mm
(EN) 1985 mm

Installation Instructions

Playworld Systems®
Models XX0187 and XX0187S
Unity Large Overhead Canopy
In-Ground and Surface Mount

Installation Preparation

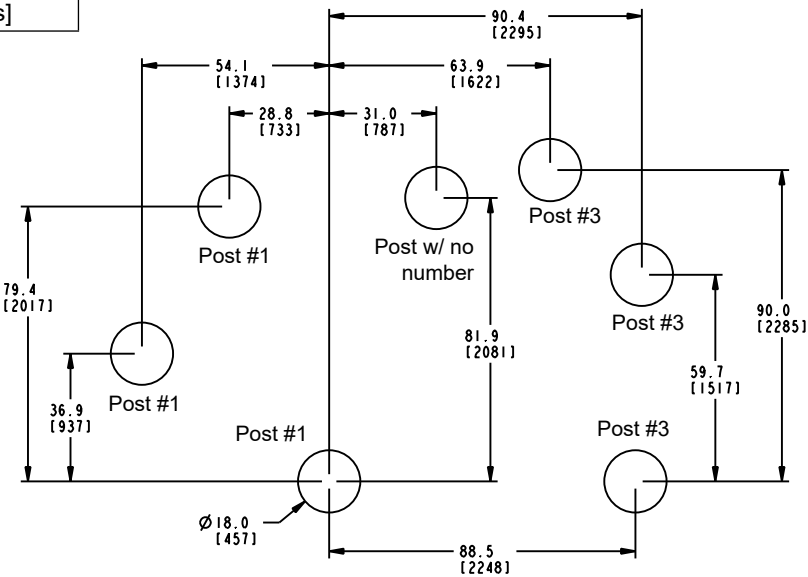
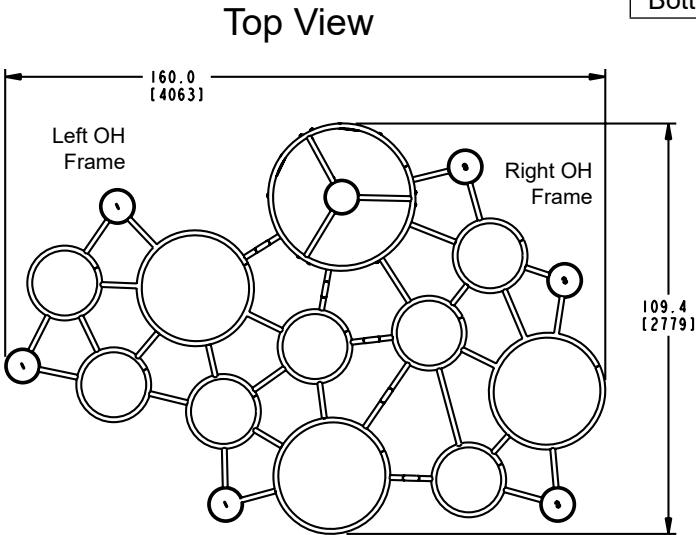
Recommended Crew: Three (3) adults
Installation Time (In-Ground): 9.5 man-hours
Installation Time (Surface Mount): 6 man-hours
Concrete Required: 0.84 cubic yard (0,63 cubic meters)
Use Zone: Refer to the information below
User Group Age (years): ASTM/CSA: 5-12, EN: 6-14

ICON KEY

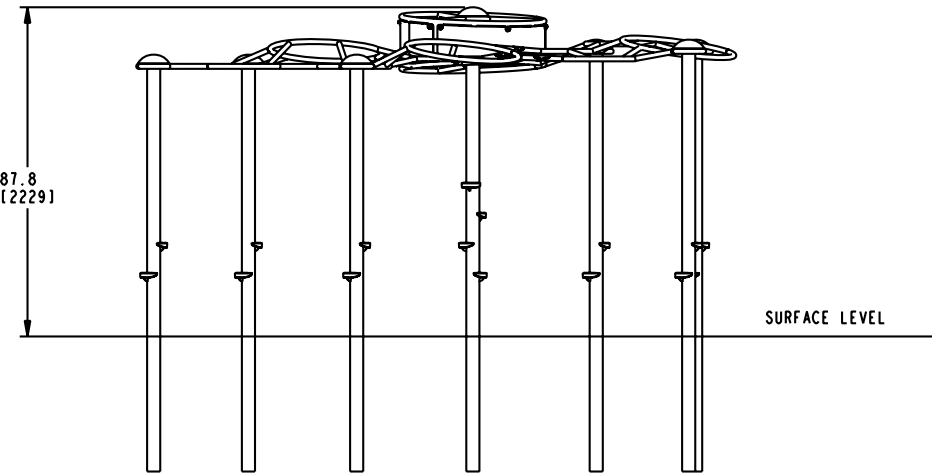
	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

Installation Instructions

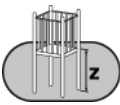
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Footing Diagram



Elevation Views
XX0187

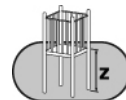
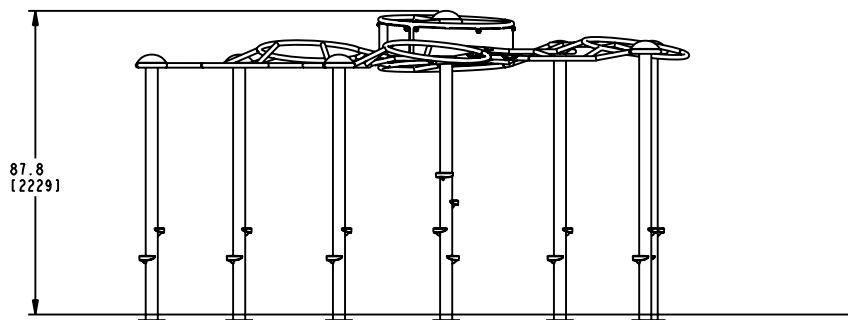
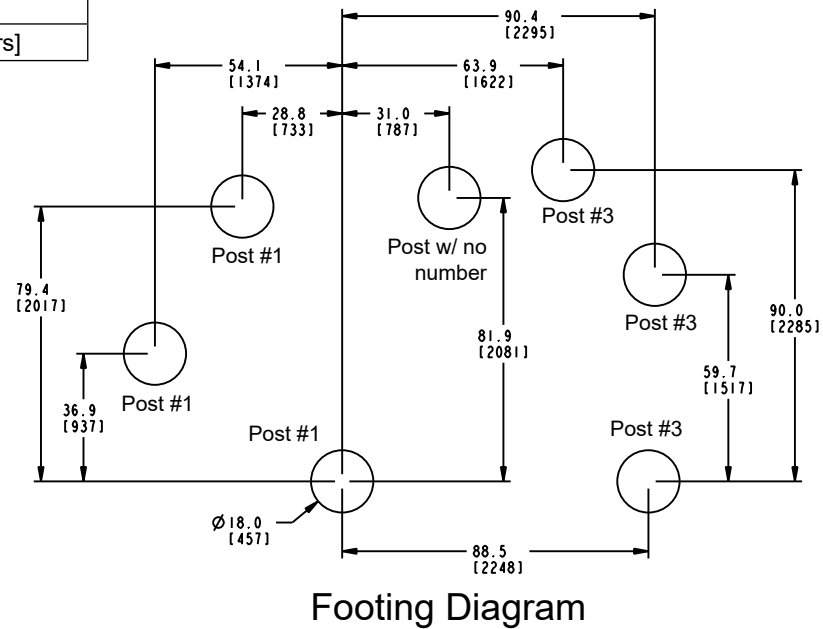
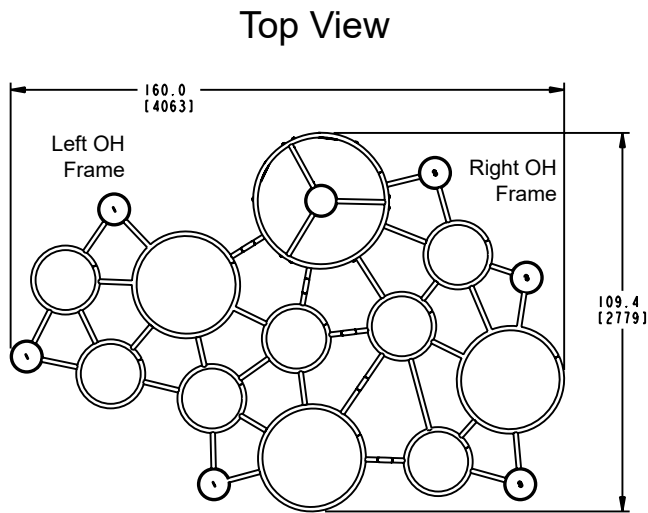


ASTM: 87.8" (2229 mm)
CSA: 2229 mm
EN: 2229 mm



Installation Instructions

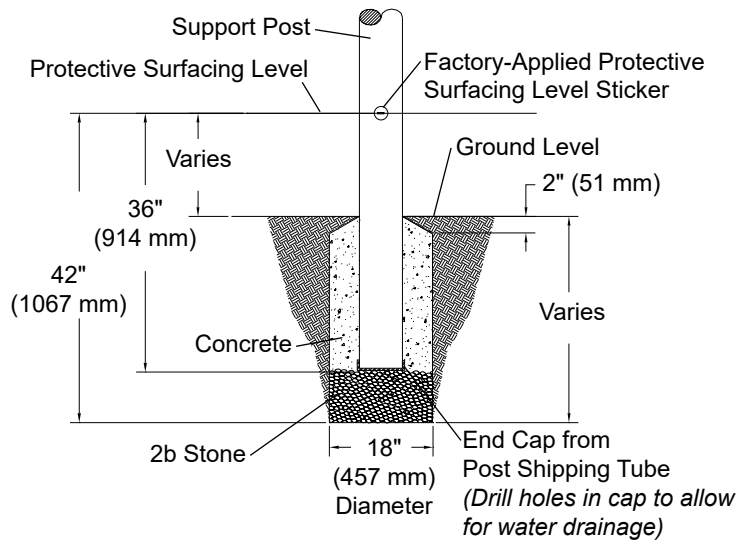
KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



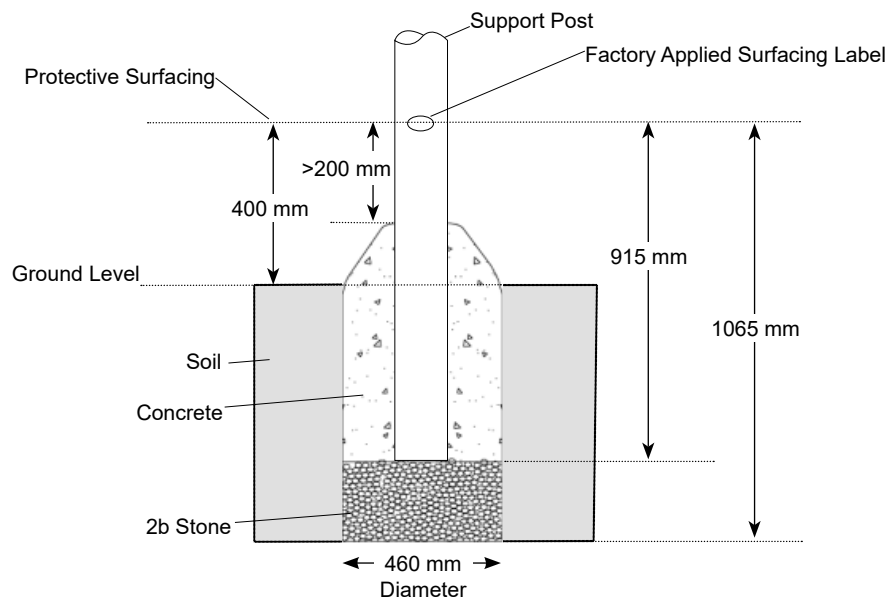
ASTM: 87.8" (2229 mm)
CSA: 2229 mm
EN: 2229 mm

Elevation Views
XX0187S

Installation Instructions



Support Post Footing Detail (ASTM/CSA)



Footing Detail Support Post (EN)

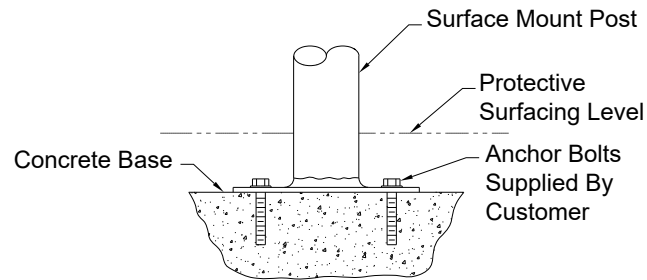
FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete.

Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).

- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions. For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

Installation Instructions



Surface Mount Footing Detail

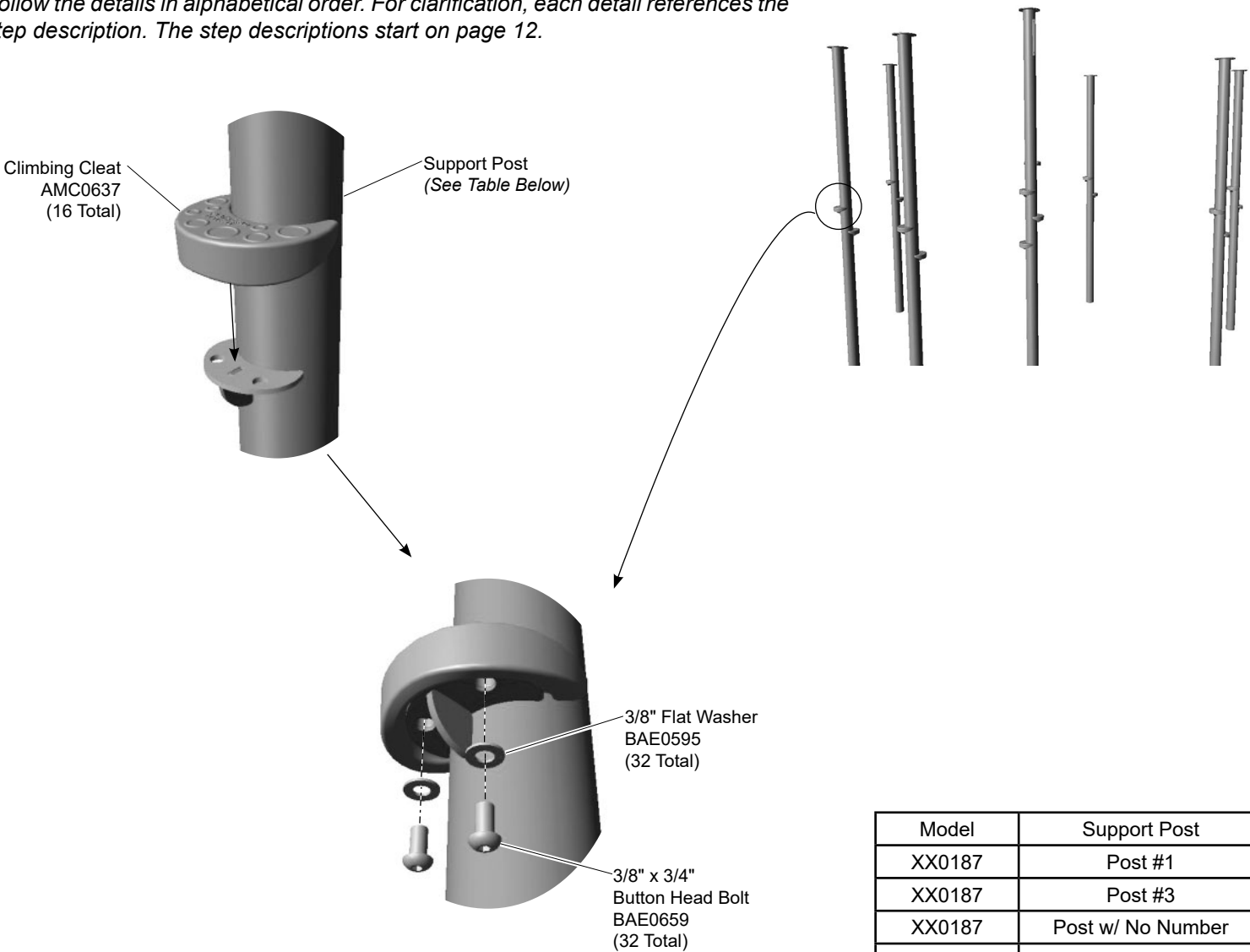
FOOTING NOTES

- All support posts and component support legs may have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Footing size may vary due to local soil and weather conditions.
- Base of footing must be below frost line.
- Comparison of protective surfacing materials is available in [Handbook for Public Playground Safety](#) published by U. S. Consumer Product Safety Commission.

Surface mount hardware is not supplied. Customer is responsible for concrete base and providing surface mount hardware as specified by a registered structural engineer for each specific project application.

Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 12.



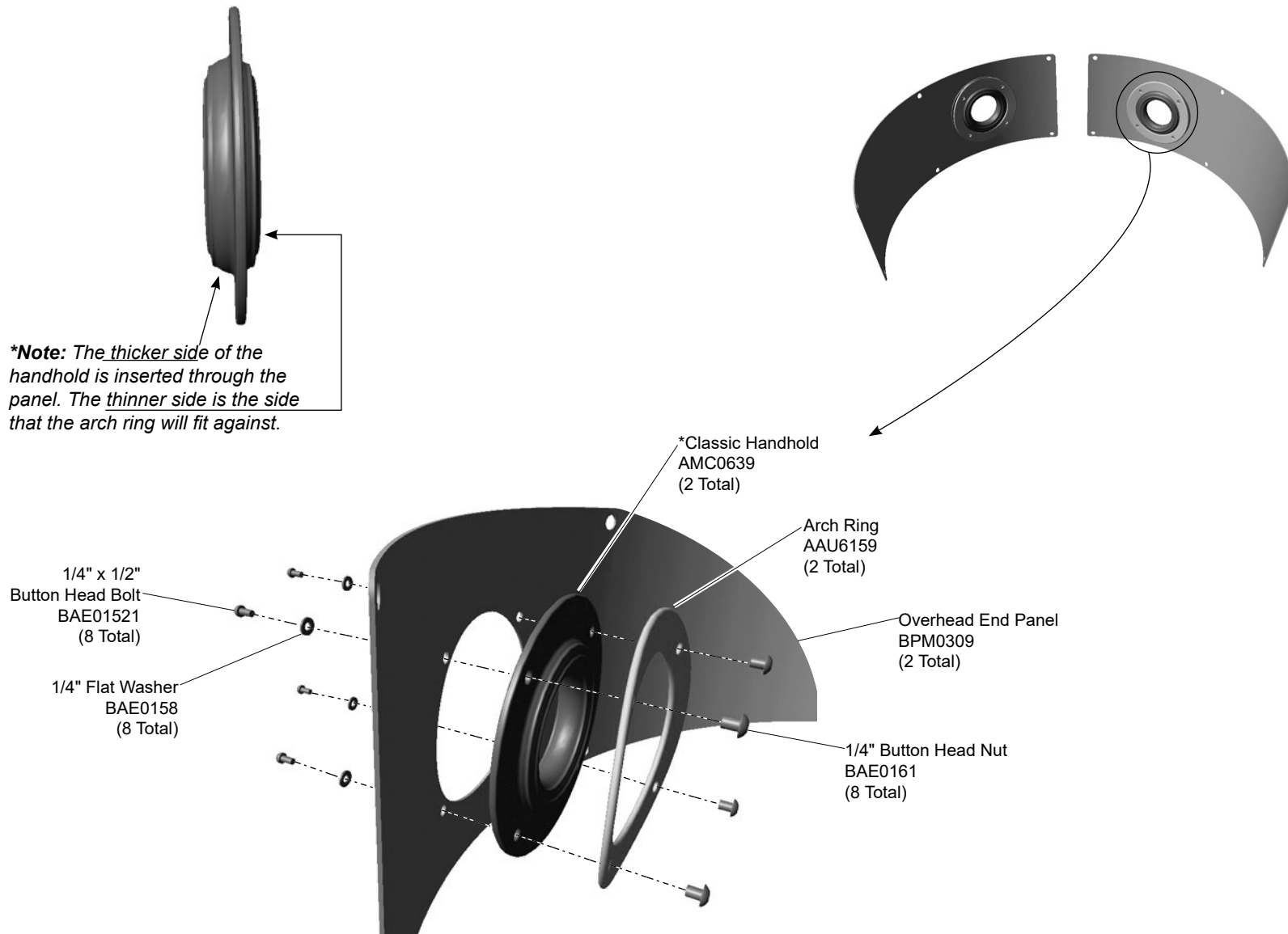
Detail A Step 4

Attach the cleats to the support posts.

Model	Support Post	Part Number	Quantity
XX0187	Post #1	APT5249	3
XX0187	Post #3	APT5251	3
XX0187	Post w/ No Number	APT5248	1
XX0187S	Post #1	APT5242	3
XX0187S	Post #3	APT5244	3
XX0187S	Post w/ No Number	APT5241	1



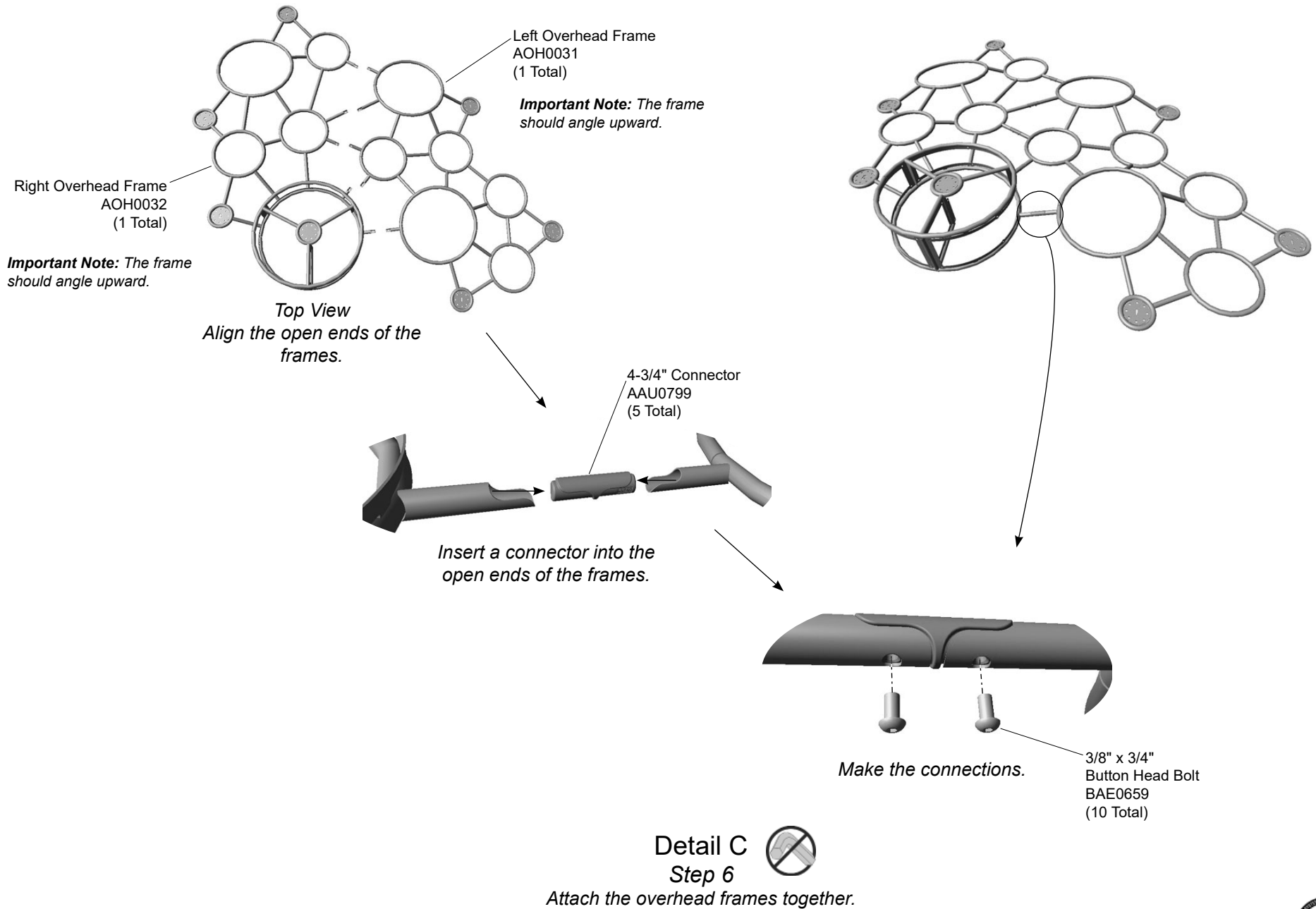
Installation Instructions



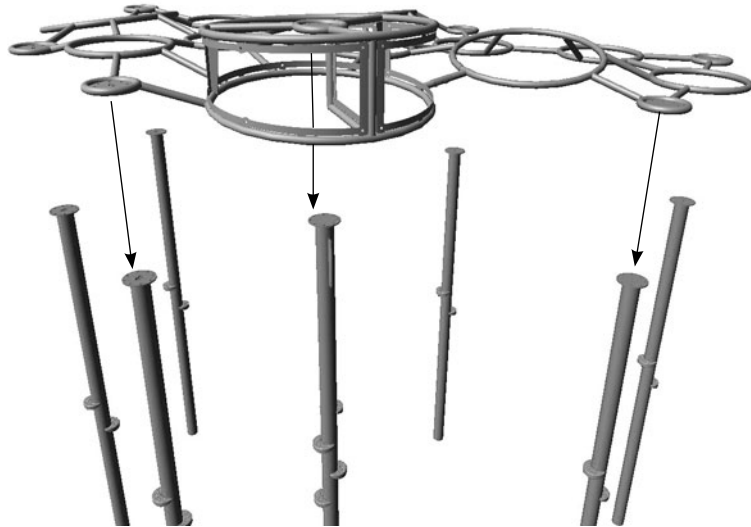
Detail B Step 5

Attach the handholds to the overhead end panels.

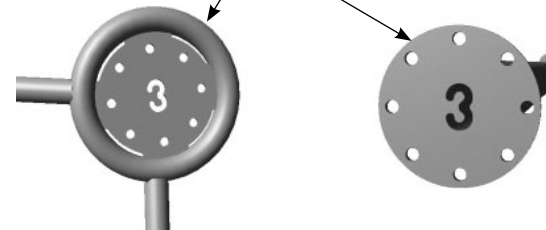
Installation Instructions



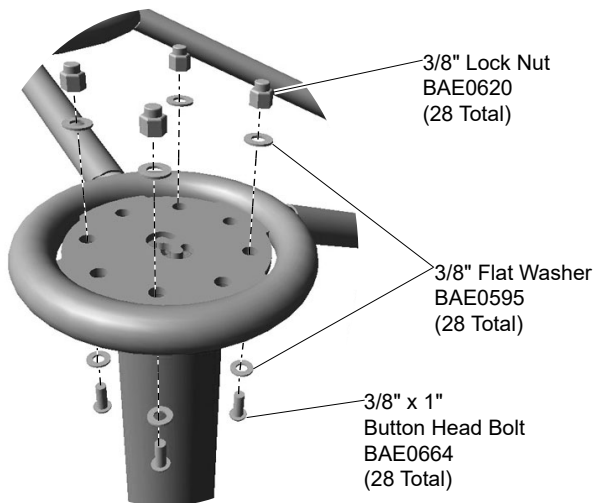
Installation Instructions



Example: Frame with a 3 stamped in its plate attaches to the post with a 3 stamped in its top.

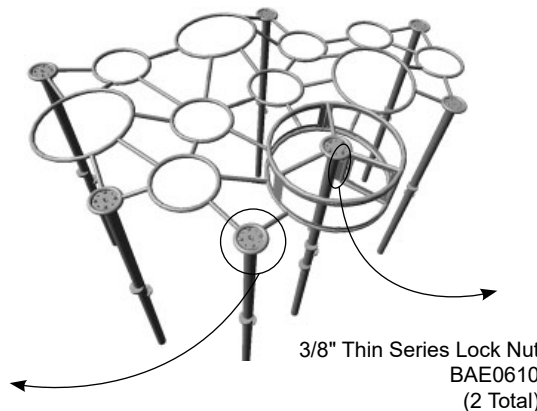


Important Note: Posts #'s 1 & 3 have their number stamped in the plate on top of the post. This number will then correspond with the number stamped into mounting plates on the overhead canopy frames. Match the frame to its corresponding posts.



Detail D-1

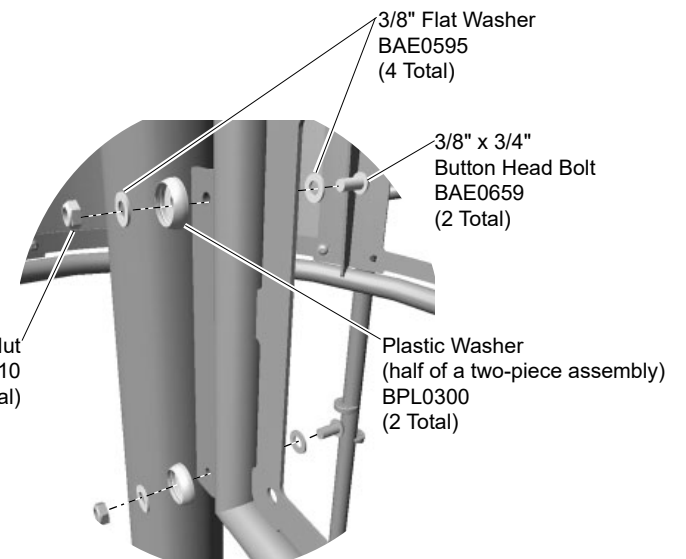
Attach the overhead frames to the support posts.



Details D-1 and D-2

Step 7

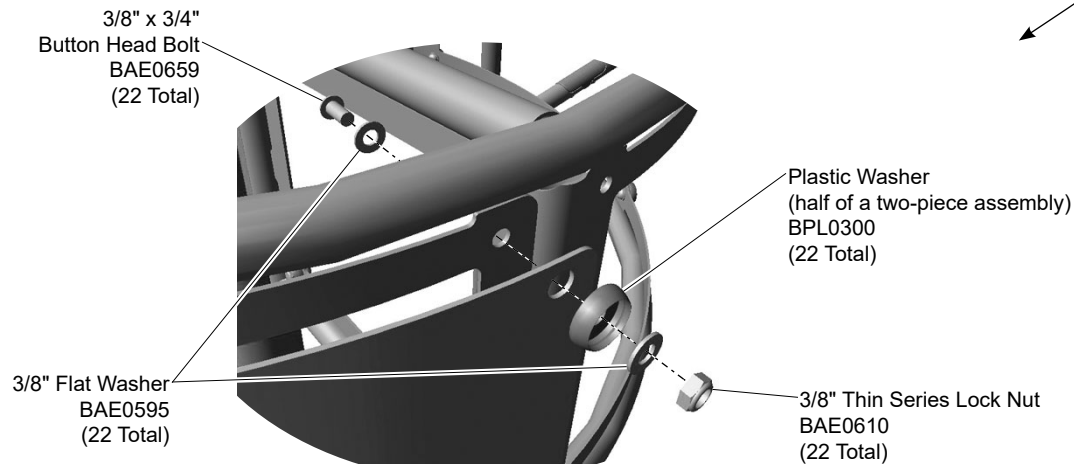
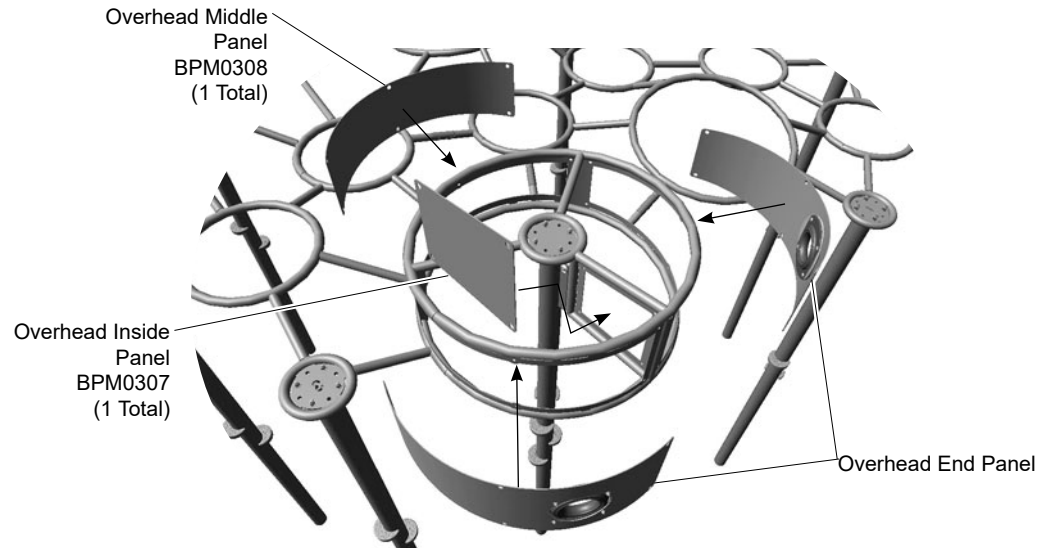
Attach the overhead frames to the support posts.



Detail D-2

Attach the arch ring frame to the support post with no number.

Installation Instructions

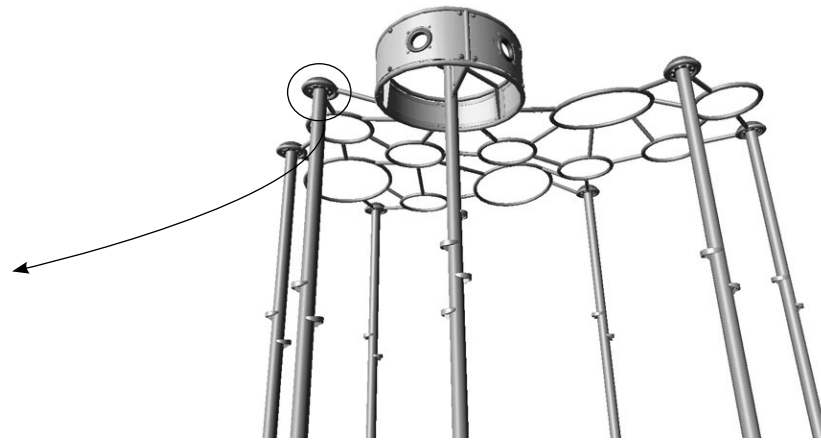
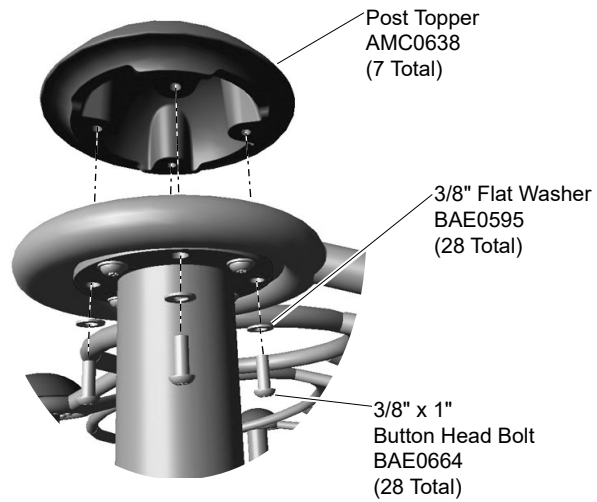


Detail E Step 8



Attach the steel panels to the arch ring frame.

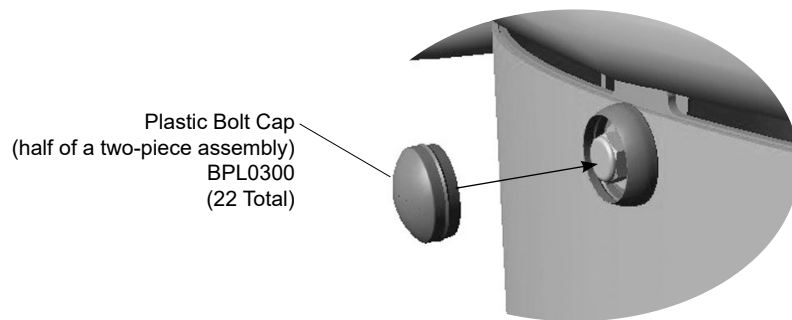
Installation Instructions



Detail F
Step 10



Attach the post topper to the support posts.



Detail G
Step 11

Press the bolt caps into the plastic washers.

Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete unless otherwise instructed. Do not install bolt caps until the structure is completely assembled and properly footed.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate or prepare the footings as shown on page 4-5 of this document. Use the **Support Post Footing Detail** the in-ground model.

Step 4: Attach the cleats to the support posts. See **Detail A**. Place a cleat over each bracket on the support posts and attach as shown. Fully tighten the connections according to tightening torque specifications (See **Final Details**).

Step 5: Attach the handholds to the overhead end panels. See **Detail B**. Attach the handholds to the end panels as shown making sure to insert the thicker center part of the handhold through the end panel first. Fully tighten the connections according to tightening torque specifications (See **Final Details**).

Step 6: Attach the overhead frames together. See **Detail C**. Position the overhead frames next to each other as shown, insert a connector into the open ends of the frames and attach as shown.

Step 7: Attach the overhead frames to the support posts. See **Details D-1 and D-2**. Place the support posts in, or on, their designated footings and block and brace in place. See the **Footing Diagram** and **Top View** for location of the posts and frames respectively. With adequate manpower place the frame assembly on top of the posts and attach as shown. Note the attachment of the arch ring frame to the support post with no number.

Important Note: Posts #'s 1 & 3 have their number stamped in the plate on top of the post. This number will then correspond with the number stamped into mounting plates on the overhead canopy frames. Match the frame to it's corresponding posts. See the **Example** on the same page.

Step 8: Attach the steel panels to the arch ring frame on the right overhead frame. See **Detail E**. Locate the panels against the arch ring frame and attach as shown. Fully tighten the connections according to tightening torque specifications (See **Final Details**).

Final Details.

Step 9: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

In-Ground: Block and brace for concrete. Pour concrete after all equipment has been assembled. Allow 72 hours for concrete to completely cure.

Surface Mount: Bolt down all surface mount supports in accordance with specifications provided by your registered structural engineer.

Important Note: Surface mount hardware is not supplied. Customer is responsible for concrete base and for providing surface mount hardware as specified by a registered structural engineer for each specific project application.

Step 10: Attach the post topper to the support posts. See **Detail F**. Place a post topper on top of each support post and attach as shown. Fully tighten the connections according to tightening torque specifications (See **Final Details**).

Step 11: Press the bolt caps into the plastic washers. See **Detail G**. Press a bolt cap into each plastic flanged washer as shown.

Note: The plastic caps install easier when they are warm.

Step 12: For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the component at eye level.

Bill of Materials

XX0187 - UNITY LARGE OVERHEAD CANOPY

PART NO.	DESCRIPTION	QTY.
AAU0799	CONNECTOR - 1.375" O.D. x 4.75" THREADED HOLES	5
AAU6159	RING - 9.50" O.D. x .25" - ARCH	2
AMC0637	CLIMBING CLEAT	16
AMC0638	POST TOPPER	7
AMC0639	NEW CLASSIC HANDHOLD	2
AOH0031	OVERHEAD - NEW CLASSICS - LEFT	1
AOH0032	NEW CLASSICS OVERHEAD - FRAME	1
APT5248	POST - 6.00" O.D. x 120.50" w/CLEATS	1
APT5249	POST - 6.00" O.D. x 107.88" w/CLEATS	3
APT5251	POST - 6.00" O.D. x 111.88" w/CLEATS	3
BAE01521	BOLT - 1/4"-20 x 1/2" BUTTON HEAD - SS	8
BAE0158	WASHER - 1/4" SAE FLAT	8
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	8
BAE0595	WASHER - 3/8" SAE FLAT	164
BAE0610	NUT - 3/8"-16 THIN LOCK	24
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	28
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	66
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	56
BAE0900	WRENCH - 5/32" SHORT HEX KEY	1
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1
BAE0922	TOOL - TT 45 L WRENCH	1
BPL0300	CAP - 3/8 BOLT	24
BPM0307	PANEL - 12.79" x 12.94"	1
BPM0308	PANEL - OVERHEAD MIDDLE	1
BPM0309	PANEL - OVERHEAD ENDS	2
ASY0590	LABEL KIT - 5 YRS - 12 YRS ASTM, CSA, FRENCH	1

XX0187S - UNITY LARGE OVERHEAD CANOPY SM

PART NO.	DESCRIPTION	QTY.
AAU0799	CONNECTOR - 1.375" O.D. x 4.75" THREADED HOLES	5
AAU6159	RING - 9.50" O.D. x .25" - ARCH	2
AMC0637	CLIMBING CLEAT	16
AMC0638	POST TOPPER	7
AMC0639	NEW CLASSIC HANDHOLD	2
AOH0031	OVERHEAD - NEW CLASSICS - LEFT	1
AOH0032	NEW CLASSICS OVERHEAD - FRAME	1
APT5241	POST - 8.00" DIA x 86.38" w/CLEATS	1
APT5242	POST - 8.00" DIA x 73.75" w/CLEATS	3
APT5244	POST - 8.00" DIA x 77.75" w/CLEATS	3
BAE01521	BOLT - 1/4"-20 x 1/2" BUTTON HEAD - SS	8
BAE0158	WASHER - 1/4" SAE FLAT	8
BAE0161	NUT - 1/4"-20 x 7/16" BUTTON HEAD	8
BAE0595	WASHER - 3/8" SAE FLAT	164
BAE0610	NUT - 3/8"-16 THIN LOCK	24
BAE0620	NUT - 3/8"-16 LOCK w/NYLON CAP	28
BAE0659	BOLT - 3/8"-16 x 3/4" BUTTON HEAD - SS	66
BAE0664	BOLT - 3/8"-16 x 1" BUTTON HEAD - SS	56
BAE0900	WRENCH - 5/32" SHORT HEX KEY	1
BAE0902	TOOL - 7/32" SHORT HEX KEY WRENCH	1
BAE0922	TOOL - TT 45 L WRENCH	1
BPL0300	CAP - 3/8 BOLT	24
BPM0307	PANEL - 12.79" x 12.94"	1
BPM0308	PANEL - OVERHEAD MIDDLE	1
BPM0309	PANEL - OVERHEAD ENDS	2
ASY0590	LABEL KIT - 5 YRS - 12 YRS ASTM, CSA, FRENCH	1



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intentionally left blank.



Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Plastic Parts

- Inspect all plastic surfaces for sharp points, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed. Minor burrs or sharp edges may be removed by using a sharp utility knife or block plane to remove sharp burr.

Welds

- Inspect all welded joints. If any broken welds are detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.
To repair the Eco-Armor® coating, contact the Playworld Systems' Customer Service Department for a coating repair touch-up kit.

Footings

- Inspect component to be solid in footing and secure. If any damage is detected, barricade equipment to prevent use until repair is completed.

Surfacing

- Raking loose-fill surfacing material back into dug out and displaced areas is necessary at frequent intervals to maintain the impact absorption qualities.
- Loose-fill materials must be replenished when the surface level drops below the minimum level to maintain proper depth in accordance with your equipment's critical fall height.
- Eliminate areas of standing water by improving site drainage.
- Contact manufacturer of unitary surfacing material for specific instructions and product to use for cleaning spots and stains.
- Contact manufacturer of unitary surfacing material if rips, tears or missing material is noticed. Follow the manufacturer instructions regarding the appropriate actions necessary for the repair.

Labels

- Inspect all applied labels to ensure labels are secure, not faded or damaged. Contact your local representative if replacement labels are needed.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance

Playworld Systems®
Models XX0187 and XX0187S
Unity Large Overhead Canopy
In-Ground and Surface Mount



PLAYWORLD
The world needs play.

For Customer Service, Call
800-233-8404 or
570-522-9800 OUTSIDE U.S.
1000 Buffalo Road • Lewisburg, PA 17837
www.playworldsystems.com

Inspection Form

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST

	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect plastic parts for damage.	Medium			
Inspect surfacing to insure proper depth and distribution.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			
Inspect footing to insure support is secure and footing is not damaged.	Low			

Inspection Codes
P = Pass **F** = Fail
NA = Not Applicable

Inspector: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___



Important ! Please Read Completely Before Beginning Installation. According to a report published by the U. S. Consumer Product Safety Commission (C.P.S.C.) 72% of all playground injuries result from accidental falls. With this in mind, this equipment is designed to fill the need for safe yet challenging play. In conjunction with design efforts to reduce the possibilities of injuries, this equipment **must** be installed "Step by Step" per our installation instructions. As a new owner you are responsible for the correct installation, safe use, and maintenance of your equipment.

Installation Guidelines

- Identify all parts and thoroughly read the assembly instructions before beginning construction.
- Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and no-encroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.
- **ASTM compliance:** The overall use zone measurements for stationary play equipment should extend a minimum of 72 inches (1829 mm) from its perimeter; dimensions and configuration of the use zone are dependent upon the types of included play equipment. The use zone of stationary play equipment may be overlapped by the use zone of adjacent stationary play equipment if the adjacent designated play surfaces are no greater than 30 inches (762 mm) above the protective surfacing level. They should be a minimum of 72 inches (1829 mm) apart. If the adjacent designated play surfaces are greater than 30 inches (762 mm) above the protective surfacing level, the pieces of equipment should be a minimum of 108 inches (2743 mm) apart.
- **CSA compliance:** The overall use zone measurements for stationary play equipment should extend a minimum of 1800 mm from its perimeter; dimensions and configuration of the use zone are dependent upon the types of included play equipment. The use zone of stationary play equipment may be overlapped by the use zone of adjacent stationary play equipment if the adjacent designated play surfaces are no greater than 700 mm above the protective surfacing level. They should be a minimum of 1800 mm apart.

- **EN compliance:** The overall use zone measurements for stationary play equipment are dependent upon the fall height of the equipment. For a fall height exceeding 1500 mm a formula is applied to determine the use zone (impact zone) of the equipment. There is a minimum of 1500 mm from its perimeter; dimensions and configuration of the use zone are dependent upon the types of included play equipment. Refer to the Use Zone diagram or master structure drawing.
- Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.
- Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.
- After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.
- Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.
- Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. **Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.**
- Insure that Age Appropriate and Hard Surface Warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.

Guidelines

- **IMPORTANT!** Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. **Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.**

- The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment. Critical fall heights for Europe and Canadian compliance shall be listed on the elevation page or master structure drawing if they differ from the ASTM standard. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

Tools Required: Playworld Systems supplies a service kit that contains commonly used hex key wrenches required to assemble your equipment. You may also need: shovel, digging iron, post hole digger, steel rake, wheelbarrow, garden hoe, water hose, tape measure, level, alignment tool, 3/8" ratchet with 9/16" socket, and 9/16" combination wrench.

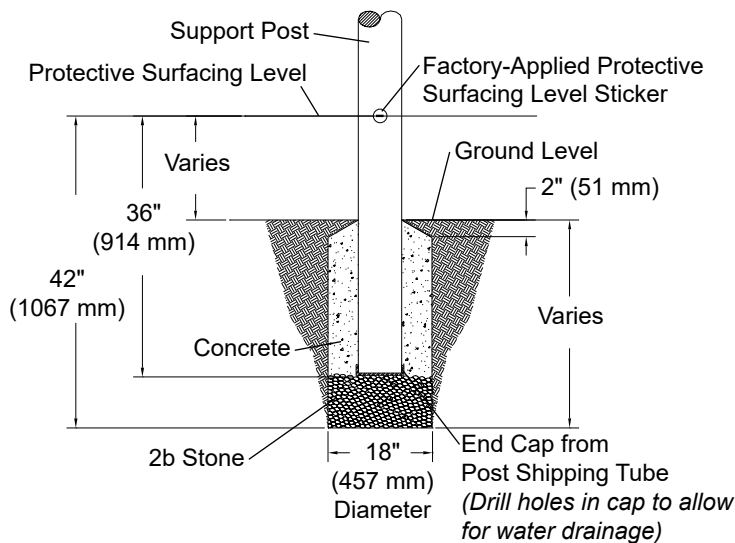
Maintenance

- Inadequate maintenance of equipment has resulted in injuries on the playground. Because the safety of playground equipment and its stability depends on good inspection and maintenance, **a comprehensive maintenance program must be developed for each playground and strictly followed.** All equipment must be inspected frequently for any potential hazards. Special attention must be given to moving parts and other components that can be expected to wear. Inspections must be carried out in a systematic manner by trained personnel. Any damaged or worn parts, or any other hazards identified during inspections must be repaired or replaced immediately. Complete documentation of all maintenance inspections and repairs must be retained.

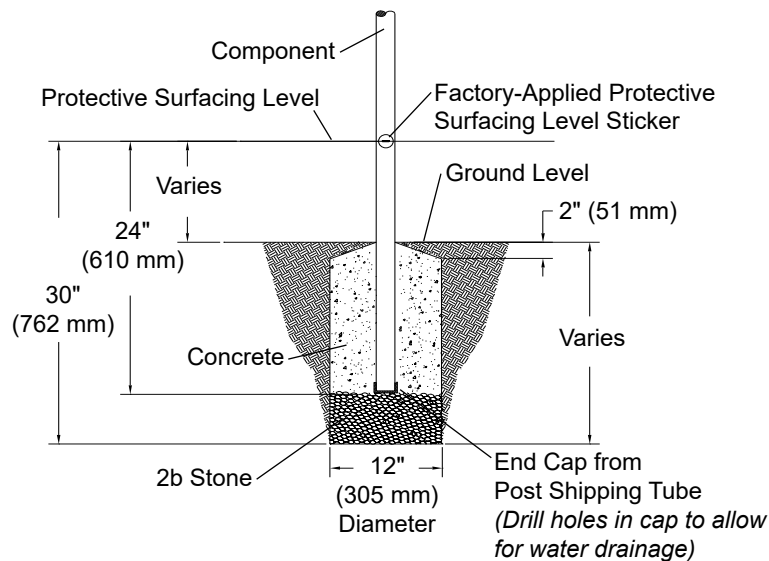
Supervision Guidelines

- Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.
- Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use the playground. Signs should be posted near the equipment indicating the recommended age of the users. Supervisors should direct children to equipment appropriate for their age.
- It is important that playground supervisors recognize that preschool-age children require more attentive supervision on playgrounds than older children.
- Do not permit the use of wet playground equipment. Wet equipment will inhibit necessary traction and gripping capabilities. Slips or falls could occur.
- Do not permit too many children on the same piece of equipment at the same time. It is suggested that children take turns.
- Constantly observe play patterns to discover possible hazardous play and suggest changes in equipment use or play patterns.

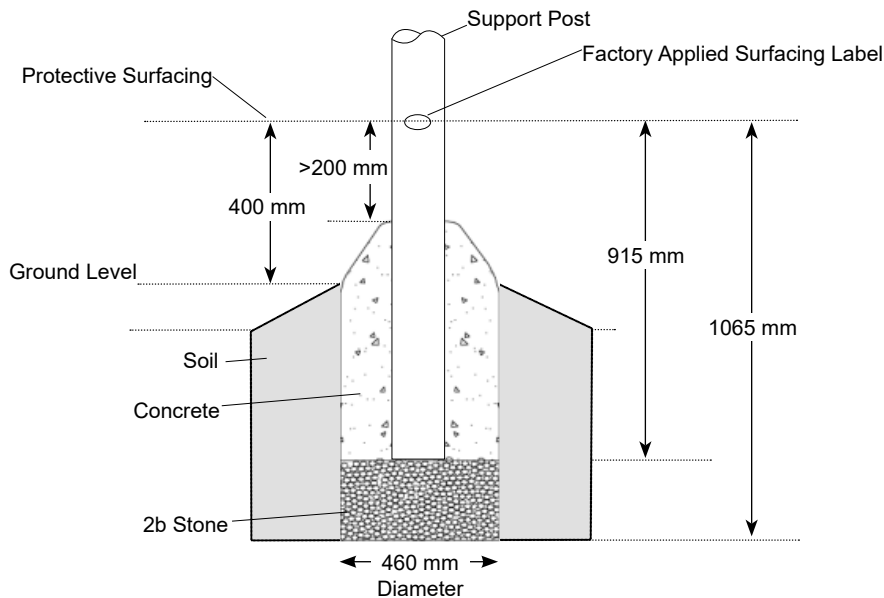
Footings Details (in ground)



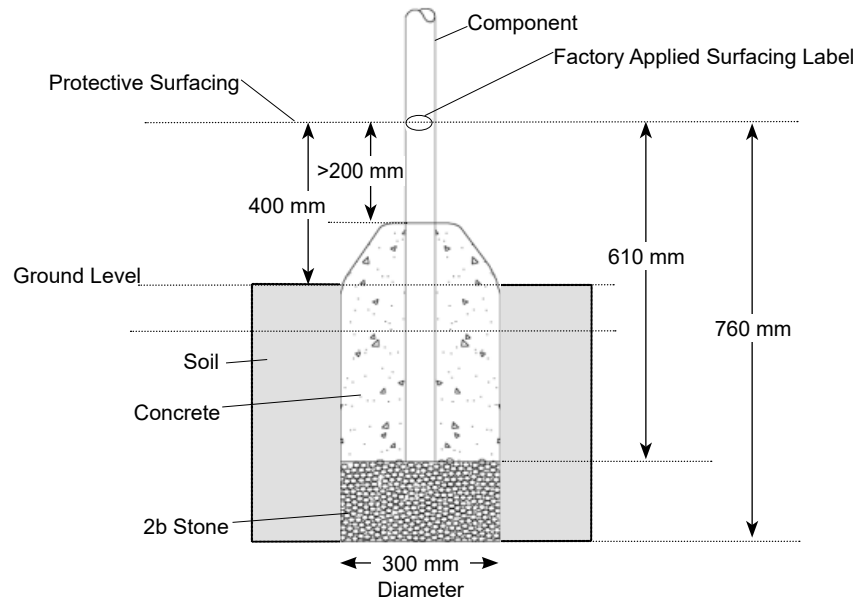
Support Post Footing Detail (ASTM/CSA)



Component Footing Detail (ASTM/CSA)

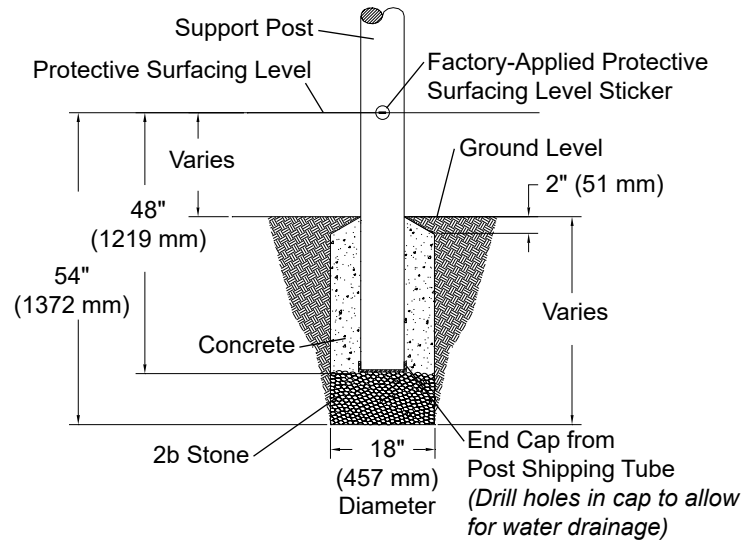


Footing Detail Support Post (EN)

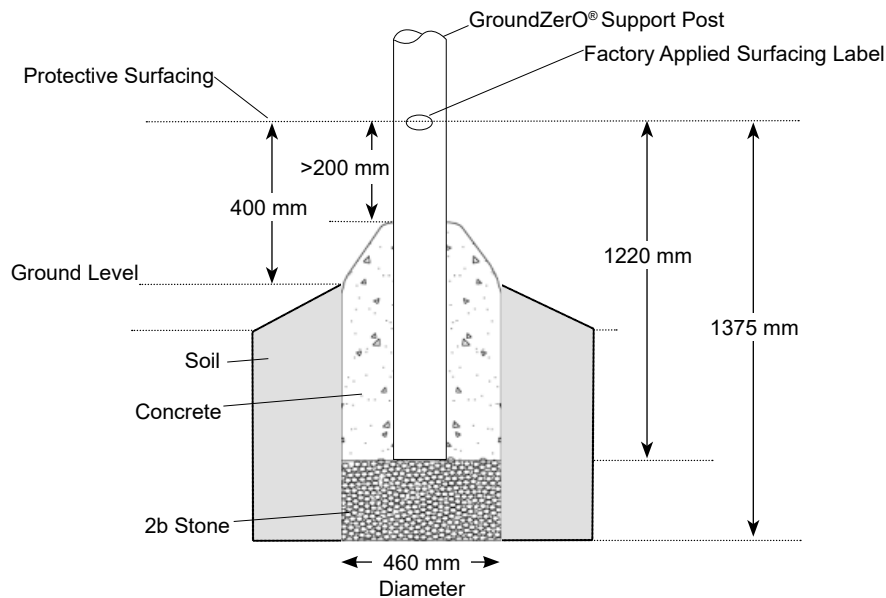


Footing Detail Component Post (EN)

Footings Notes (in ground)

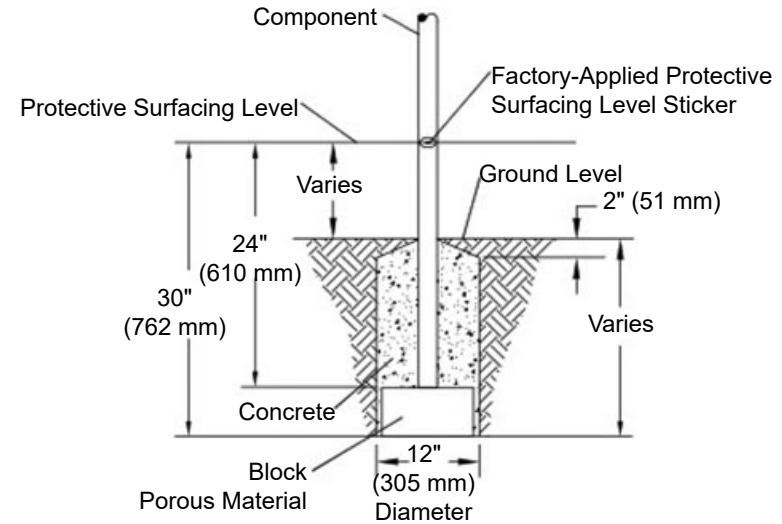


GroundZero® Support Post Footing Detail ASTM/CSA

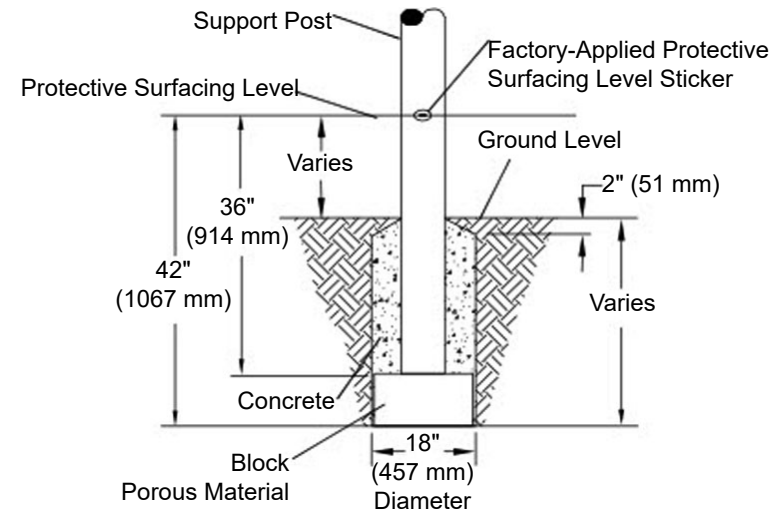


Footing Detail GroundZero® Support Post (EN)

IN GROUND FOOTING DIAGRAMS-BLOCK OPTION



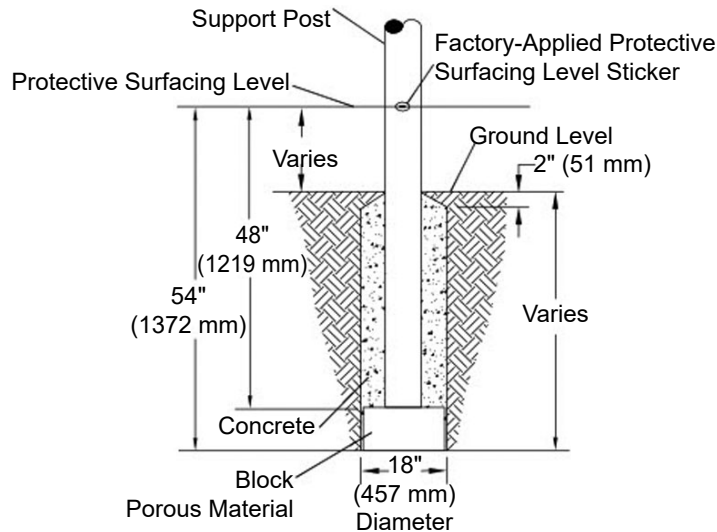
Component Footing Detail (ASTM/CSA)
Block Option



Support Post Footing Detail (ASTM/CSA)
Block Option

Footings Notes & Details (in ground)

IN GROUND FOOTING DIAGRAMS-BLOCK OPTION

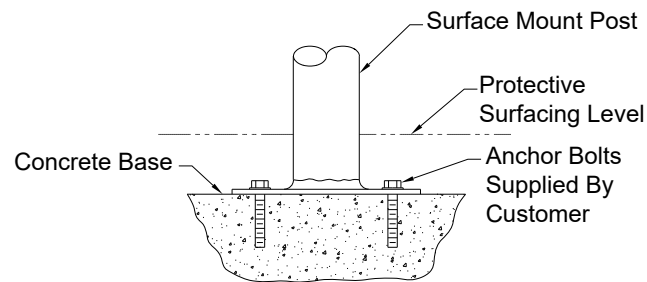


GroundZero® Support Post Footing Detail ASTM/CSA
Block Option

FOOTING NOTES (IN GROUND)

- Support post footing depth equals 42 in. (1067 mm) minus the depth of the protective surfacing material. The posts are designed to have 24" (610 mm) in concrete.
Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
GroundZero® posts are footed 12 in. (305 mm) deeper than the regular support posts, and will be marked as such on the master footing diagram.
- Component footing depth equals 30 in. (762 mm) minus the depth of the protective surfacing material. The posts are designed to have 12" (305 mm) in concrete.
Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 18 in. (457 mm).
- Most support posts and component support legs will have either a factory-applied sticker with a line, or factory-applied mark designating the level of protective surfacing on a clear and level installation site. The footing depth measurements are based on this line/mark.
- If the play equipment is installed on uneven terrain, maintain support post mark for the protective surfacing level at the lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase the bottom of the support post in concrete. Place the post directly on packed stone or other porous material.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- The base of the footing must be below the frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.

Footing Notes & Details (surface mount)



Surface Mount Footing Detail

FOOTING NOTES (SURFACE MOUNT)

- Most support posts and component support legs will have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If the play equipment is installed on uneven terrain, maintain support post mark for the protective surfacing level at the lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- The footing size may vary due to local soil and weather conditions.
- Base of footing must be below frost line.

Surface mount hardware is not supplied. Customer is responsible for concrete base and providing surface mount hardware as specified by a registered structural engineer for each specific project application.



Assembly View

Refer to the Elevation View for the specific Critical Fall Height for the component.


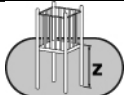

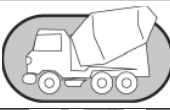
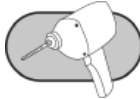


Installation Instructions

Playworld Systems®
Models XX0260, XX0261 & XX0324
Belt Seat with Swing Chain

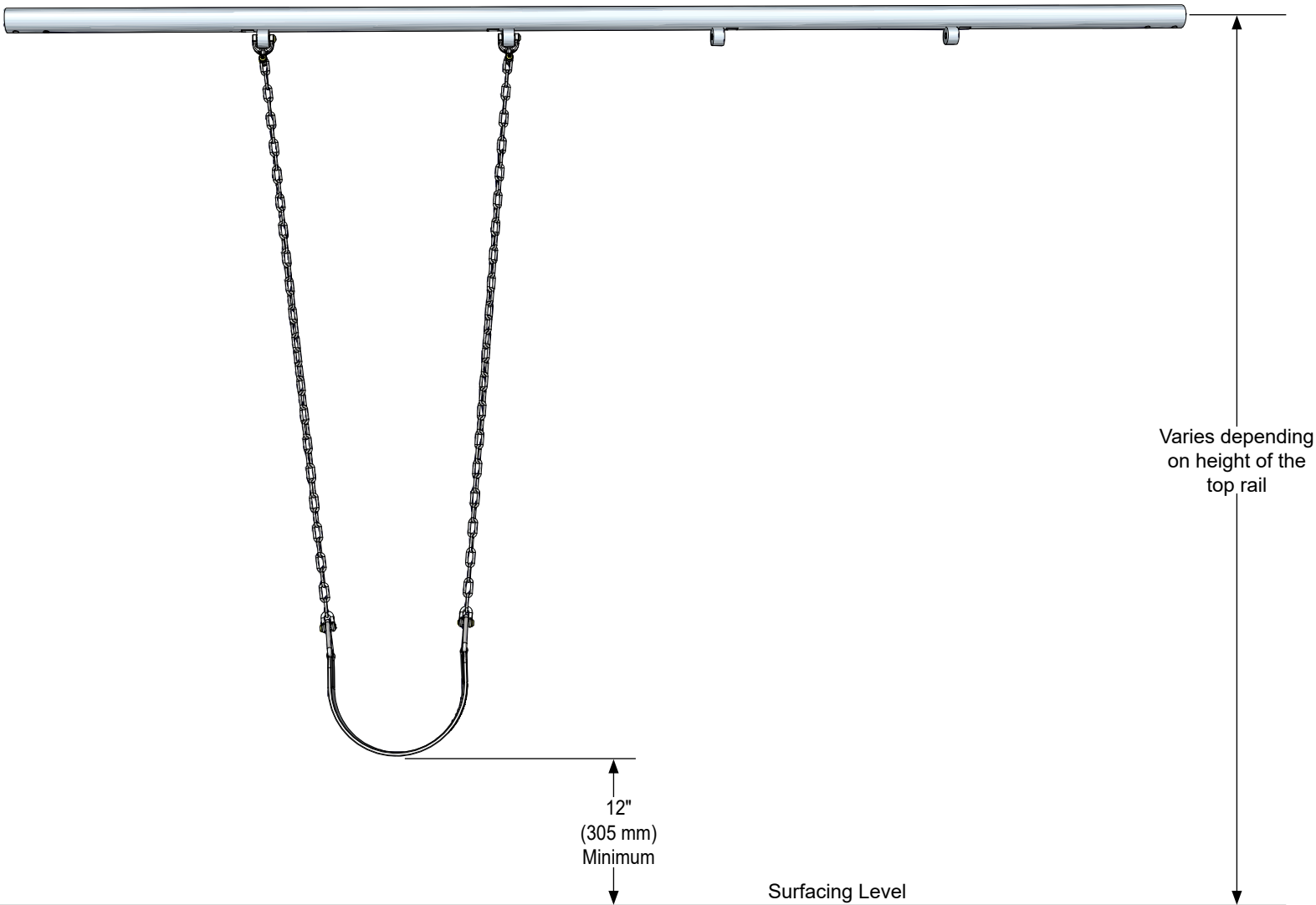
Installation Preparation

Recommended Crew: One (1) adult
Installation Time: 0.25 hour
Use Zone: Refer to the swing frame instructions
User Group Age (years): ASTM: 2-12, CSA: 1.5-12, EN: 2-14

ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

Installation Instructions

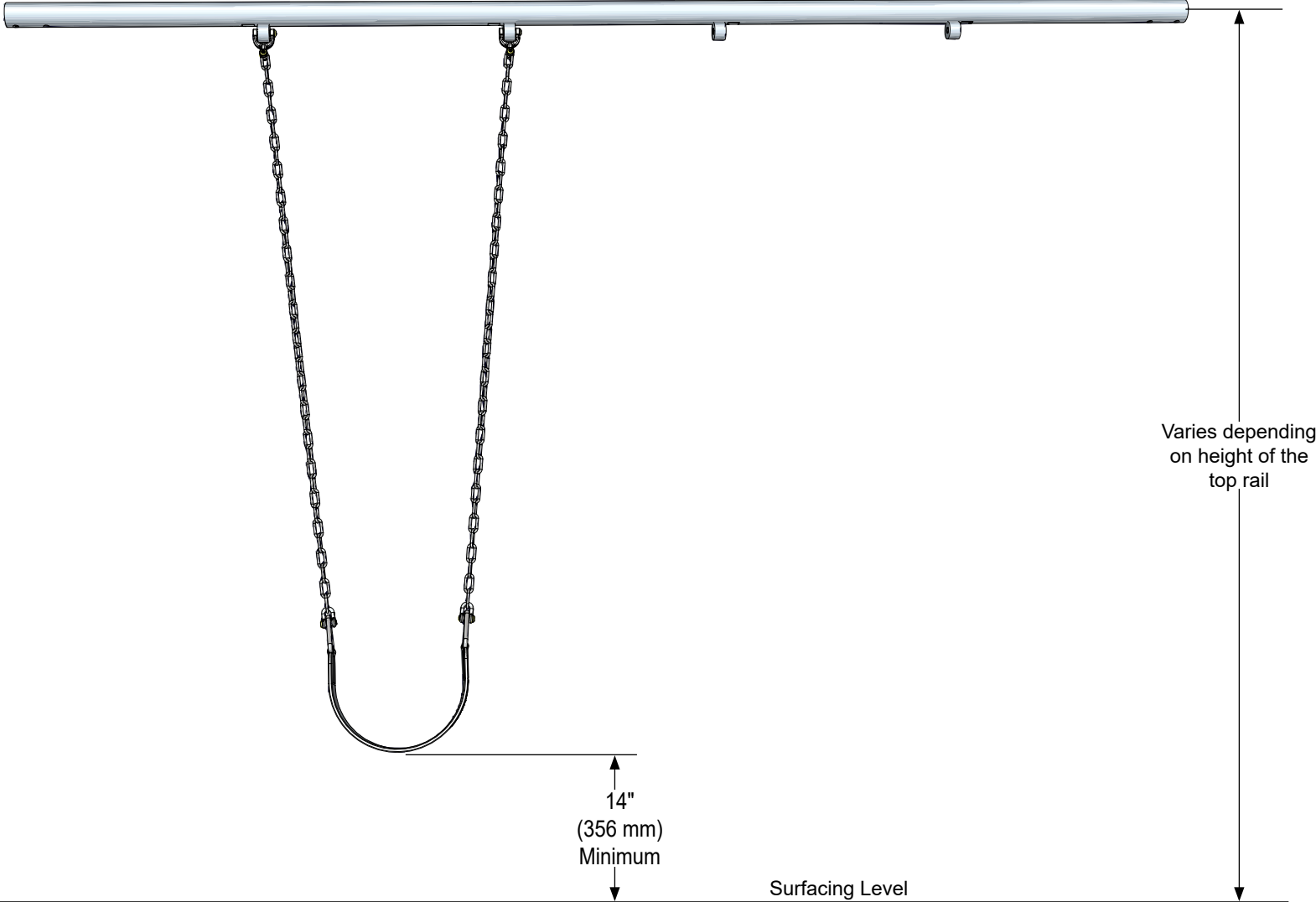


Elevation View
(ASTM/CSA)

Model Number	Critical Fall Height - ASTM/CSA	Top Rail Height
ZZXX0324	7 ft. (2134 mm)	7 ft. (2134 mm)
ZZXX0260	8 ft. (2440 mm)	8 ft. (2440 mm)
ZZXX0261	10 ft. (3050 mm)	10 ft. (3050 mm)



Installation Instructions



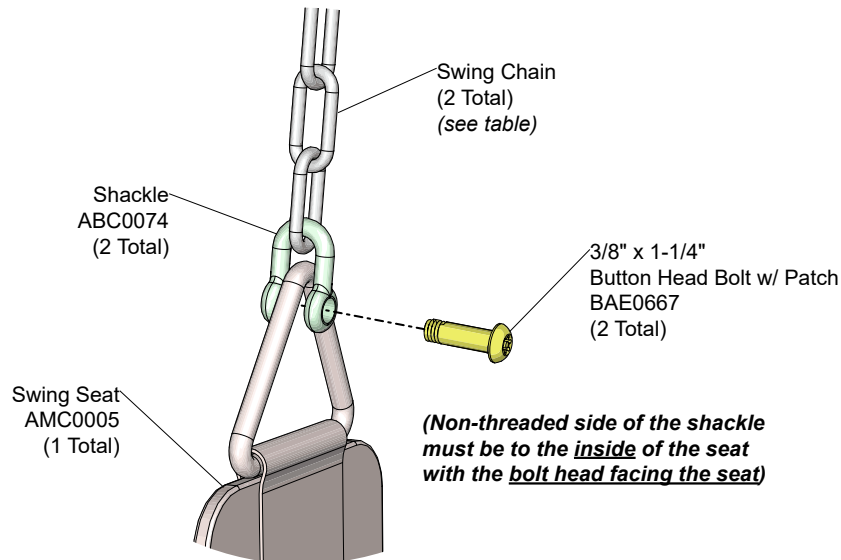
Elevation View
(EN)

Model Number	Critical Fall Height - EN	Top Rail Height
ZZXX0324	1220 mm	7 ft. (2134 mm)
ZZXX0260	1370 mm	8 ft. (2440 mm)
ZZXX0261	1675 mm	10 ft. (3050 mm)



Installation Instructions

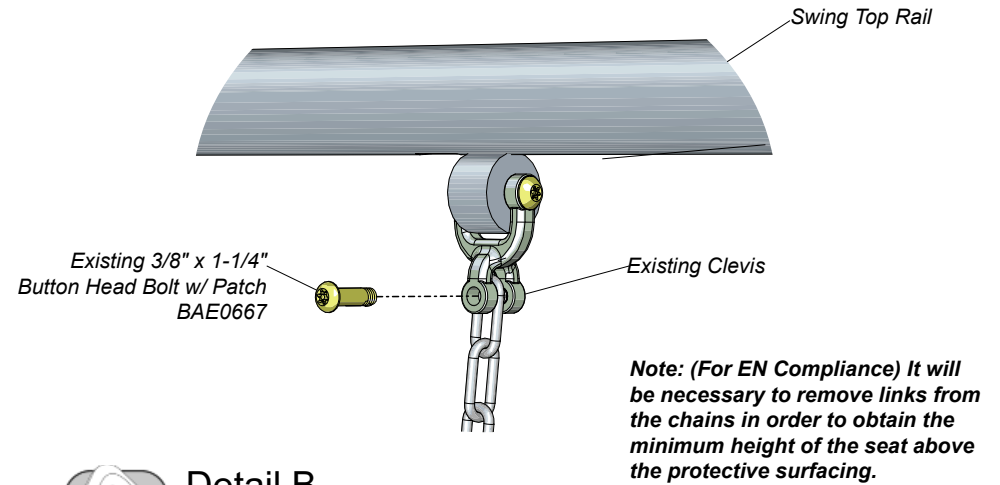
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



Detail A Step 3

Attach the swing seat to the swing chains.

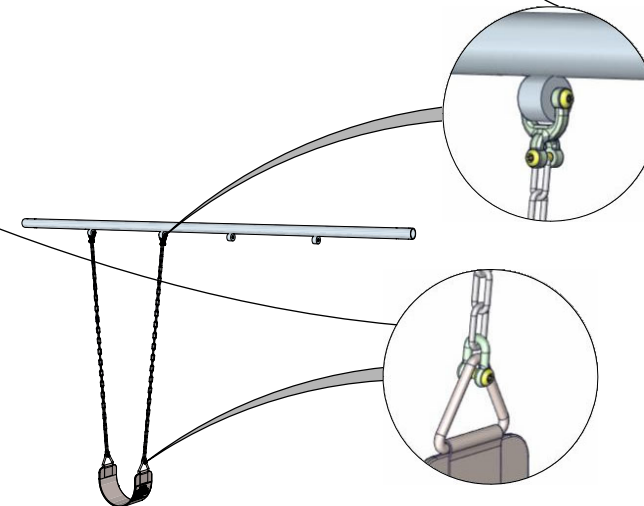
Model Number	Swing Chain Part No.	Top Rail Height
ZZXX0324	ACN0090	7 ft. (2134 mm)
ZZXX0260	ACN0091	8 ft. (2440 mm)
ZZXX0261	ACN0092	10 ft. (3050 mm)



Detail B Step 4

Attach the swing seat assembly to the existing swing hangers.

Note: (For EN Compliance) It will be necessary to remove links from the chains in order to obtain the minimum height of the seat above the protective surfacing.



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Attach the swing seat to the swing chains. See **Detail A**. Attach the seats to the chains as shown. Ensure that the non-threaded side of the shackle is to the inside of the seat. Fully tighten the connections according to tightening torque specifications.

Torque specifications - Nuts and Bolts: Snug tighten and tighten an additional one-half turn.

Step 4: Attach the swing seat assembly to the existing swing hangers. See **Detail B**. Remove the 1-1/4" bolt from the swing hanger clevis with the included wrench. Select the swing seat assembly and place last link of chain between the open end of the clevis and attach as shown. Ensure that the bolt is inserted through the non-threaded side of the clevis and threaded into the opposite side. Fully tighten the connections according to tightening torque specifications.

Note: (For EN Compliance) It will be necessary to remove links from the chains in order to obtain the minimum height of the seat above the protective surfacing.

Step 5: For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the component at eye level.

ZZXX0324 - BELT SEAT WITH SWING CHAIN **- 7 ft. (2134 mm) TOP RAIL HEIGHT**

PART NO.	DESCRIPTION	QTY.
ABC0074	CNCTR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0090	CHAIN - 53.71" 4/0	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1
ASY0556	LABEL KIT - 2-12 YEARS BELT SWING - ASTM	1

ZZXX0260 - BELT SEAT WITH SWING CHAIN **- 8 ft. (2438 mm) TOP RAIL HEIGHT**

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0091	CHAIN - 65.11" 4/0	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1
ASY0556	LABEL KIT - 2-12 YEARS BELT SWING - ASTM	1

ZZXX0261 - BELT SEAT WITH SWING CHAIN **- 10 ft. (3048 mm) TOP RAIL HEIGHT**

PART NO.	DESCRIPTION	QTY.
ABC0074	CONNECTOR - 5/16" CHAIN SHACKLE w/3/8"-16 THREAD	2
ACN0092	CHAIN - 89.01" 4/0	2
AMC0005	SEAT - SLASH PROOF BELT	1
BAE0667	BOLT - 3/8"-16 x 1-1/4" BUTTON HEAD w/NYLON PATCH	2
BAE0922	TOOL - TT 45 L WRENCH	1
ASY0556	LABEL KIT - 2-12 YEARS BELT SWING - ASTM	1



Swing Seat

- Inspect swing seat for sharp points, breaks, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed.

Fasteners

- Inspect for loose fasteners. Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Surfacing

- Raking loose-fill surfacing material back into dug out and displaced areas is necessary at frequent intervals to maintain the impact absorption qualities.
- Loose-fill materials must be replenished when the surface level drops below the minimum level to maintain proper depth in accordance with your equipment's critical fall height.
- Eliminate areas of standing water by improving site drainage.
- Contact manufacturer of unitary surfacing material for specific instructions and product to use for cleaning spots and stains.
- Contact manufacturer of unitary surfacing material if rips, tears or missing material is noticed. Follow the manufacturer instructions regarding the appropriate actions necessary for the repair.

Labels

- Inspect all applied labels to ensure labels are secure, not faded or damaged. Contact your local representative if replacement labels are needed.

Equipment Maintenance

Playworld Systems® Models XX0324, XX0260 & XX0261 Belt Seat with Swing Chain



Inspection Form

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

Preventive Maintenance

. . . for Safety's Sake!

INSPECTION CHECKLIST

	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect chain and swing seat for damage.	Medium			
Inspect surfacing to insure proper depth and distribution.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			

Inspection Codes

P = Pass **F** = Fail
NA = Not Applicable

Inspector: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___

Important ! Please Read Completely Before Beginning Installation. According to a report published by the U. S. Consumer Product Safety Commission (C.P.S.C.) 72% of all playground injuries result from accidental falls. With this in mind, this equipment is designed to fill the need for safe yet challenging play. In conjunction with design efforts to reduce the possibilities of injuries, this equipment **must** be installed “Step by Step” per our installation instructions. As a new owner you are responsible for the correct installation, safe use, and maintenance of your equipment.

Installation Guidelines

- Identify all parts and thoroughly read the assembly instructions before beginning construction.
- Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and no-encroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.

(ASTM / CSA)

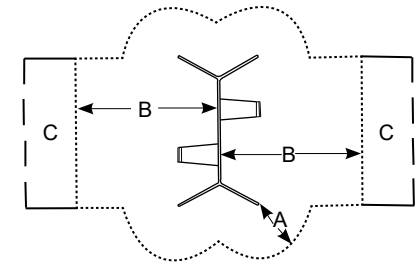
- For belt and rigid swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the height measured from the pivot point above the surfacing material measured from a point directly beneath the pivot on the supporting structure. The use zone on the sides of the swing should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.
- For enclosed infant swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the measurement from the pivot point to the swing seat surface measured from a point directly beneath the pivot on the supporting structure. The use zone on the ends of the swing (support structure) should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.

Belt/Rigid Seat Swing Zones

A = Side Use Zone
72 in. (1829 mm)

B = End Use Zone
Height of Pivot Point
from Surfacing x 2
Both Sides of Top Rail

C = No-encroachment Zone
72 in. (1829 mm)



- The use zone on either end of the swing (72 inches [1829 mm]) may be overlapped by the use zone on either end of the another swing (72 inches [1829 mm]). Swing zones on either side of the top rail may **not** be overlapped by the use zones of other play equipment.

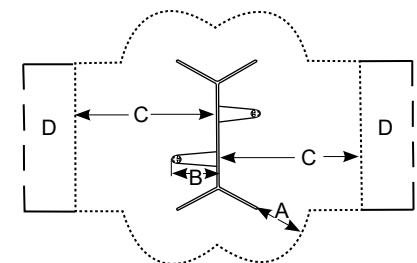
Infant Seat Swing Zones

A = Side Use Zone
72 in. (1829 mm)

B = Distance from Pivot Point
to Swing Seat Surface

C = End Use Zone: B x 2
Both Sides of Top Rail

D = No-encroachment Zone
72 in. (1829 mm)



Installation Instructions

(EN)

• For areas conforming to the EN-1176 Standard, the impact area shall be determined by calculating the horizontal distance where the swing seat is at an 60° arc and adding the appropriate amount of distance based upon the type of protective surfacing. This distance shall be covered by protective surfacing on both sides of the top rail. The protective surfacing shall be appropriate for the maximum fall height of the swing. There is no difference in the calculation based on the type of swing seat.

The impact area on both sides of top rail = $(0.867 \times \text{Distance from pivot point to seat}) + \text{either } 1750 \text{ mm if unitary surfacing or } 2250 \text{ mm if loose-fill surfacing is used}$. There shall be a minimum corridor of 1750 mm centered on each swing seat for the length of the impact area.

Use Zones - EN Compliance

A = Width of the corridor centered on the swing seat
1750 mm

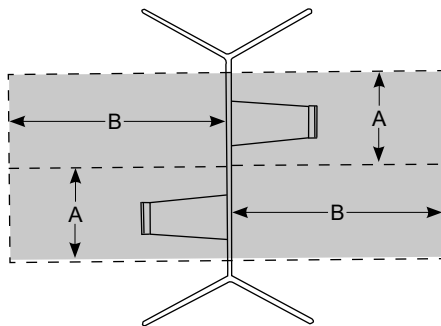
B = Length of the use zone on both sides of the top rail (2438 mm)

Infant Seats: 3290 mm for areas with unitary surfacing

or 3790 mm for areas covered with loose fill surfacing.

Belt seat or Rigid Seats: 3510 mm for with unitary surfacing

or 4010 mm for areas covered with loose fill surfacing



• Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.

• Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.

• After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.

• Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.

• Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. **Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.**

• Insure that hard surface warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.

• **IMPORTANT!** Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. **Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.**

Installation Instructions

- The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

Tools Required: Playworld Systems supplies a service kit that contains commonly used hex key wrenches required to assemble your equipment. You may also need: shovel, digging iron, post hole digger, steel rake, wheelbarrow, garden hoe, water hose, tape measure, level, alignment tool, 3/8" ratchet with 9/16" socket, and 9/16" combination wrench.

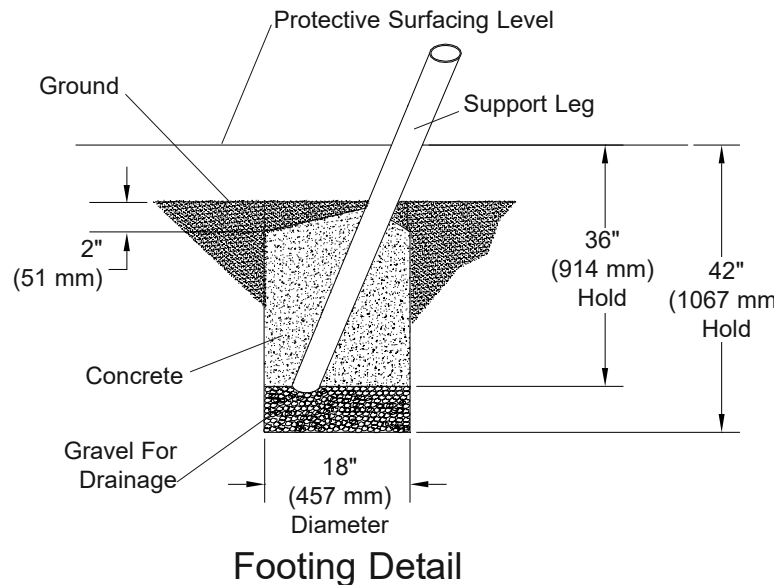
Maintenance

- Inadequate maintenance of equipment has resulted in injuries on the playground. Because the safety of playground equipment and its stability depends on good inspection and maintenance, **a comprehensive maintenance program must be developed for each playground and strictly followed.** All equipment must be inspected frequently for any potential hazards. Special attention must be given to moving parts and other components that can be expected to wear. Inspections must be carried out in a systematic manner by trained personnel. Any damaged or worn parts, or any other hazards identified during inspections must be repaired or replaced immediately. Complete documentation of all maintenance inspections and repairs must be retained.

Supervision Guidelines

- Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.
- Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use the playground. Signs should be posted near the equipment indicating the recommended age of the users. Supervisors should direct children to equipment appropriate for their age.
- It is important that playground supervisors recognize that preschool-age children require more attentive supervision on playgrounds than older children.
- Do not permit the use of wet playground equipment. Wet equipment will inhibit necessary traction and gripping capabilities. Slips or falls could occur.
- Do not permit too many children on the same piece of equipment at the same time. It is suggested that children take turns.
- Constantly observe play patterns to discover possible hazardous play and suggest changes in equipment use or play patterns.

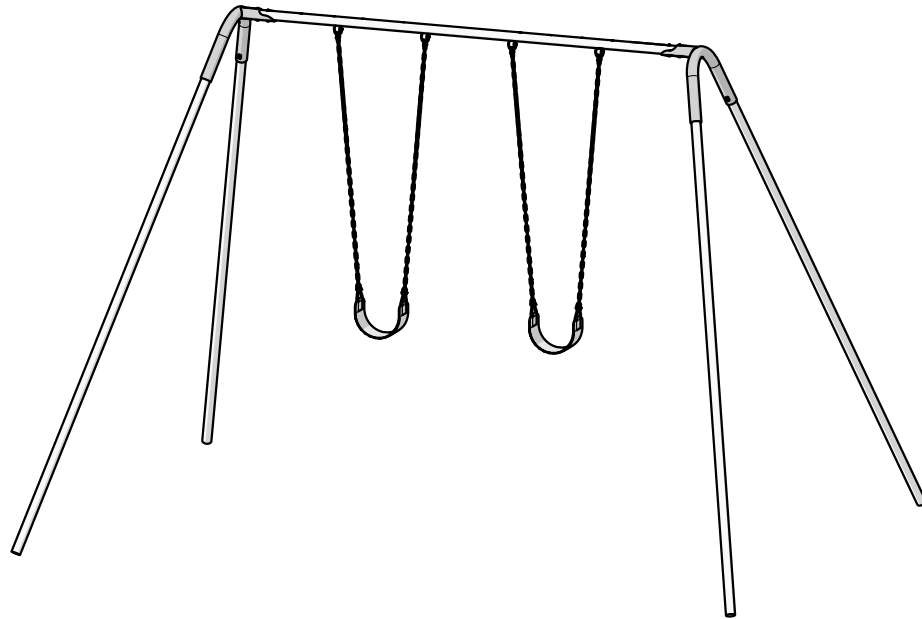
Installation Instructions



FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete.
Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
- All support posts and component support legs shall have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.

Note: The 2-unit swing frame can be expanded by the addition of Add-a-Bay(s). If additional bays are added, determine footing hole locations and spacing by referring to the Footing Diagram on the Add-a-Bay installation instructions.



Assembly View (*representative model*)

Model	Height
ZZXX0823	8" (2438 mm)
ZZXX0825	10" (3048 mm)

Installation Instructions

Playworld Systems®

Models ZZXX0823 and ZZXX0825

8 ft. (2438 mm) and 10 ft. (3048 mm)

Two Unit Standard Swing

Installation Preparation

Recommended Crew: Three (3) adults


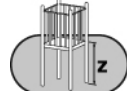

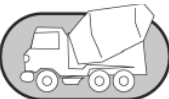


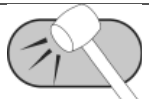
Installation Time: 3 man-hours

Concrete Required: 0.52 cubic yard (0,40 cubic meters)

Use Zone:..... Refer to information on pages 1 & 2

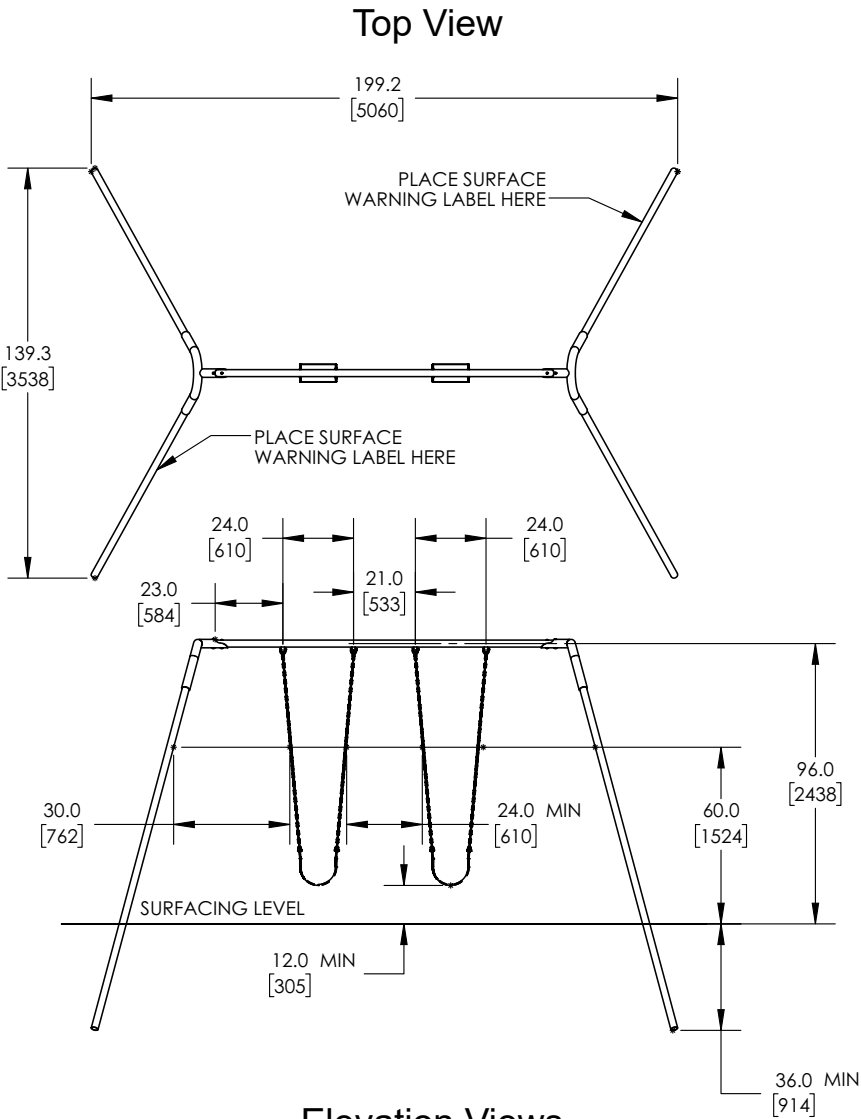
User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

ICON KEY

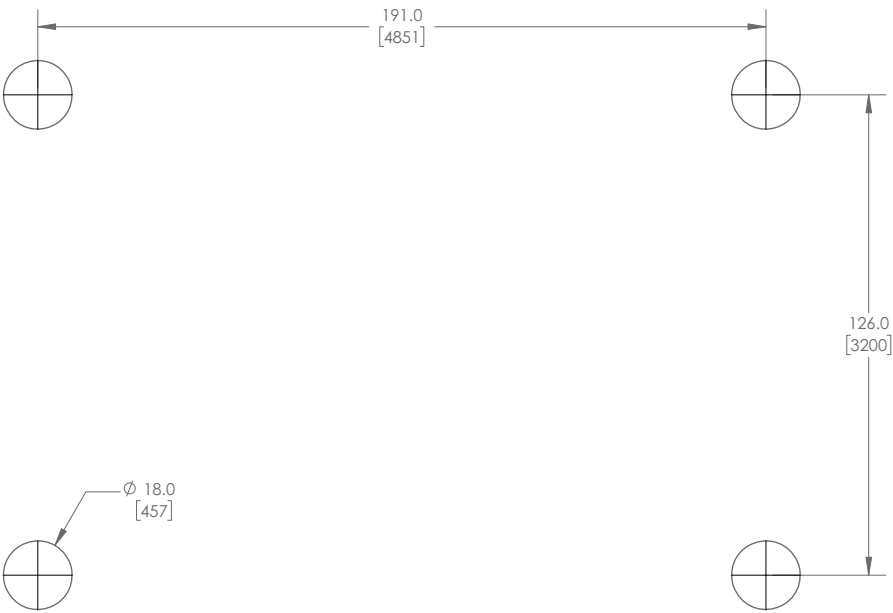
	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



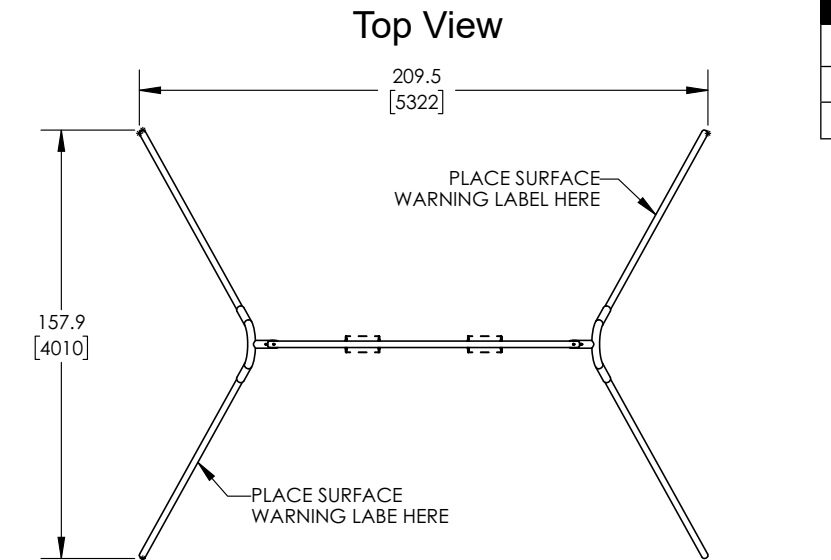
Elevation Views
ZZXX0823



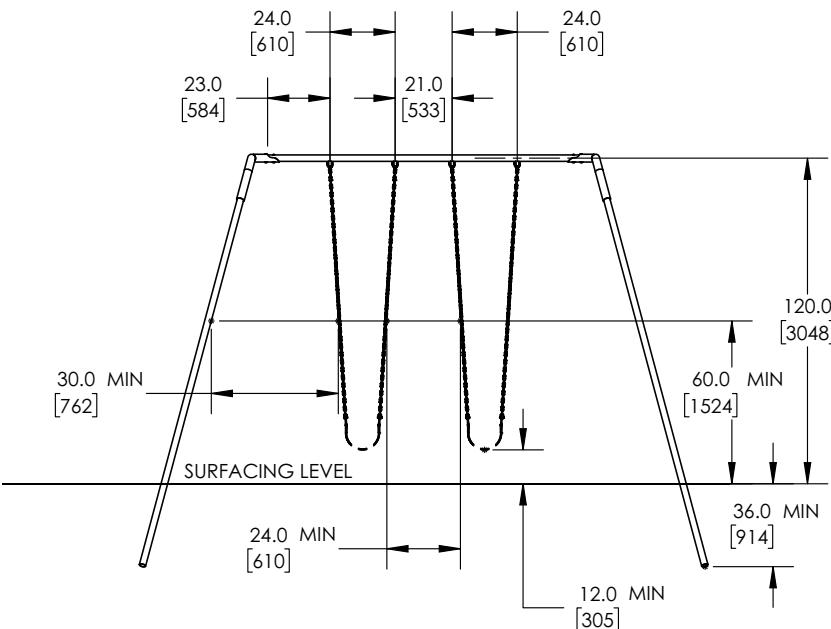
Footing Diagram



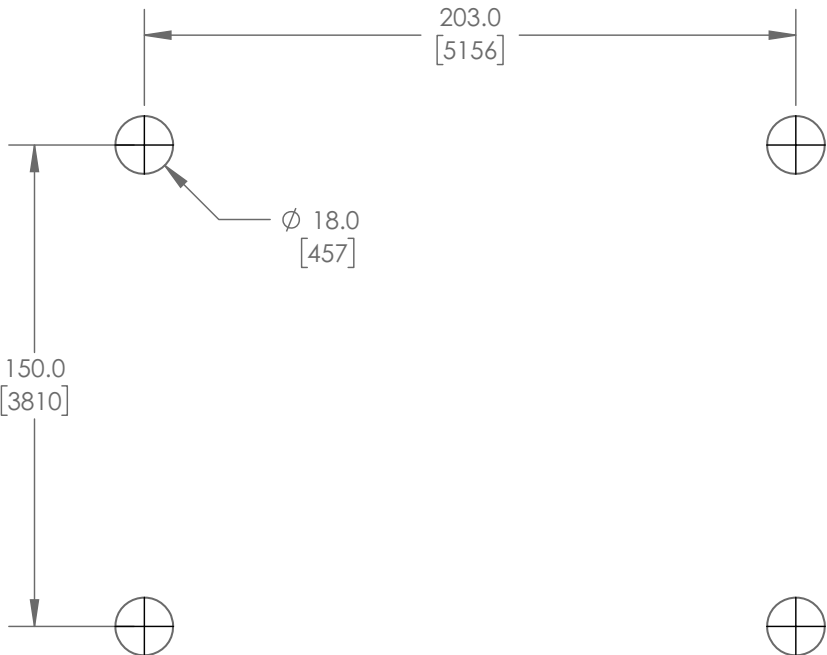
Installation Instructions



KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]



Elevation Views
ZZXX0825



Footing Diagram



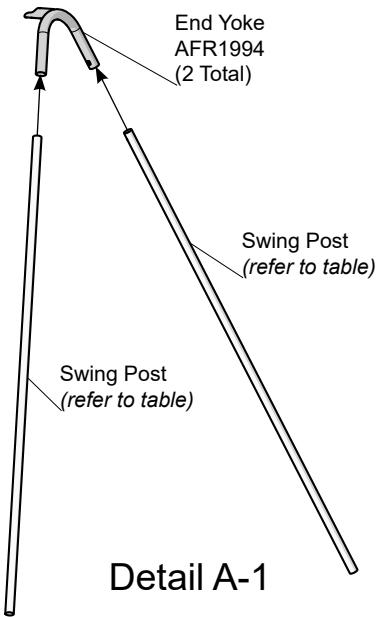
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 11.

Details A-1 and A-2

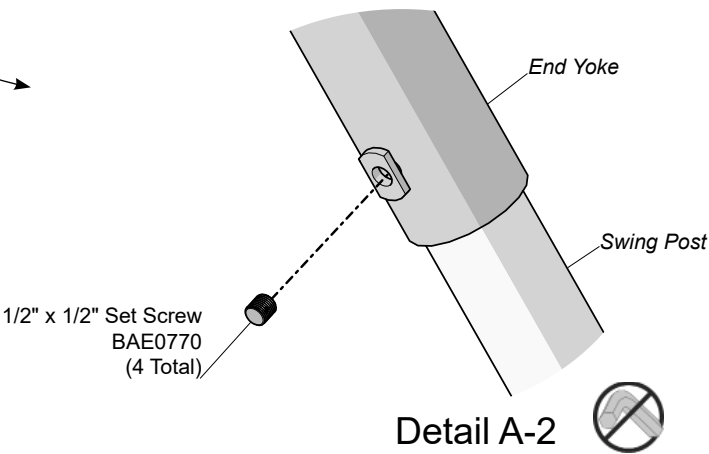
Step 4

Attach the swing posts to the end yokes.

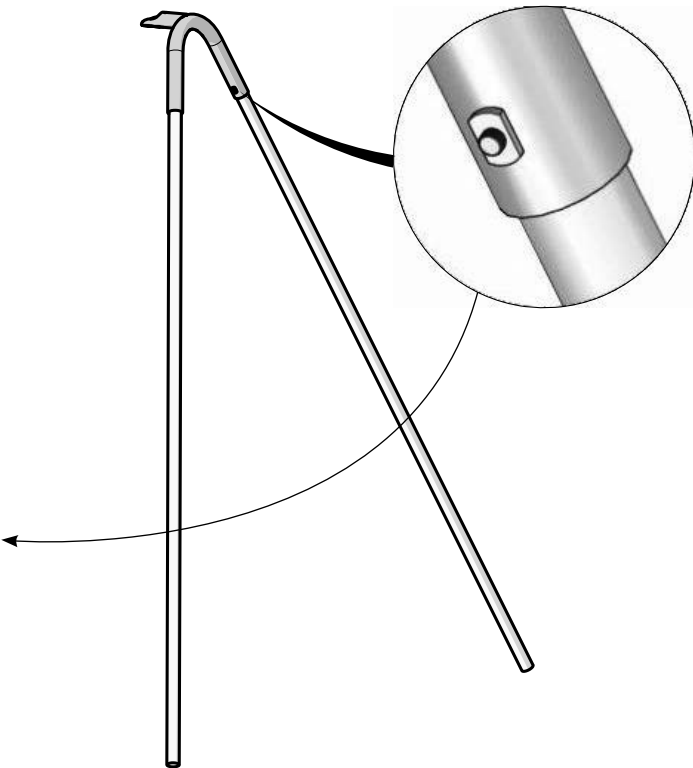


Model	Post Part Number
ZZXX0823	APT0066
ZZXX0825	AAC0555

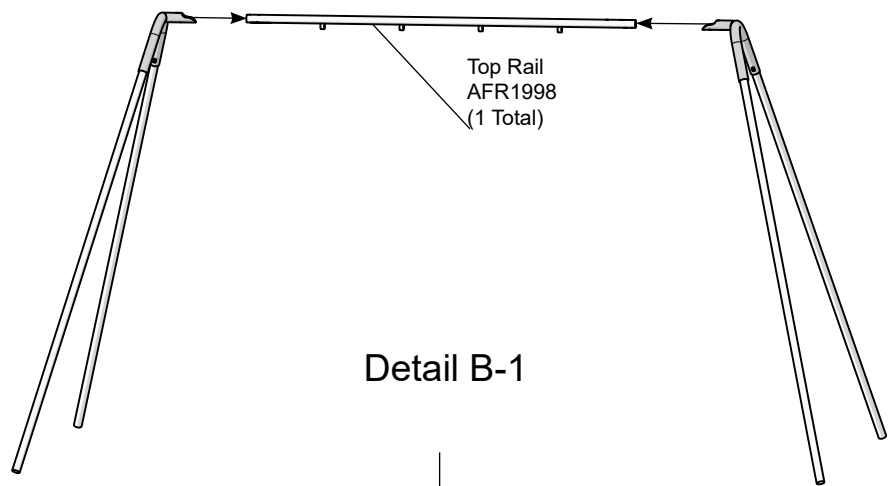
Detail A-1



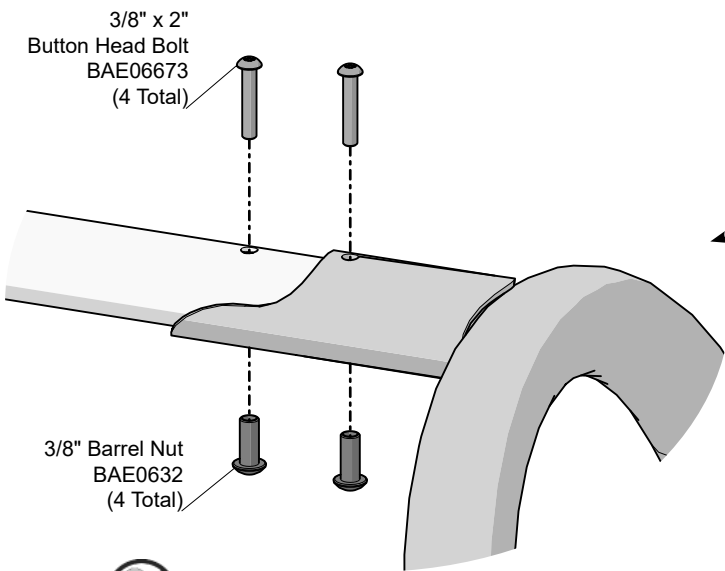
Detail A-2



Installation Instructions

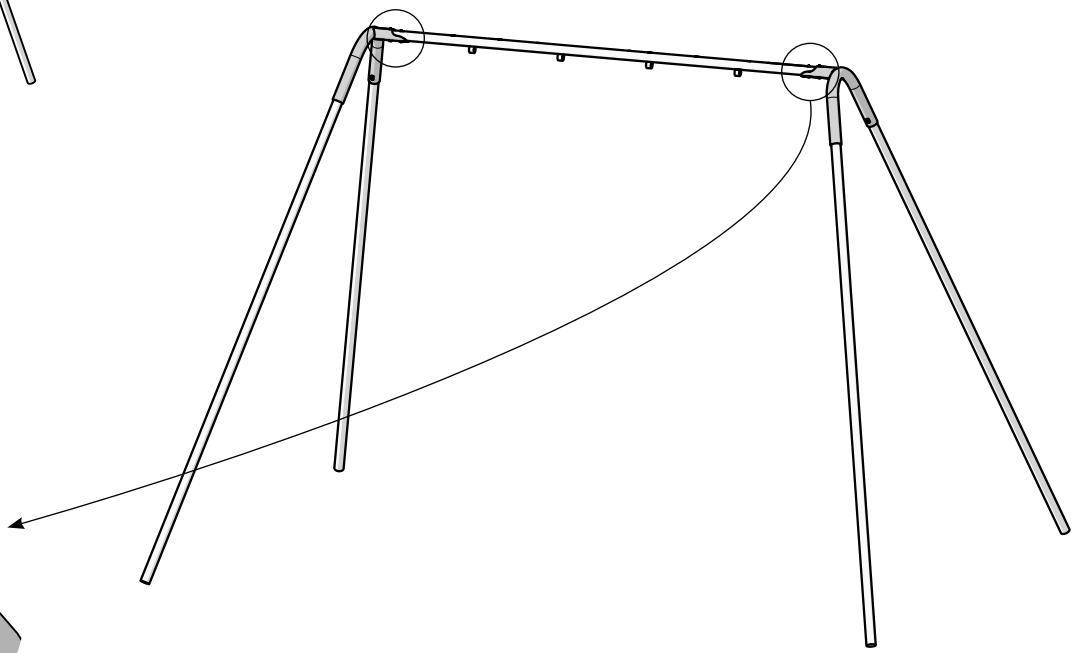


Detail B-1

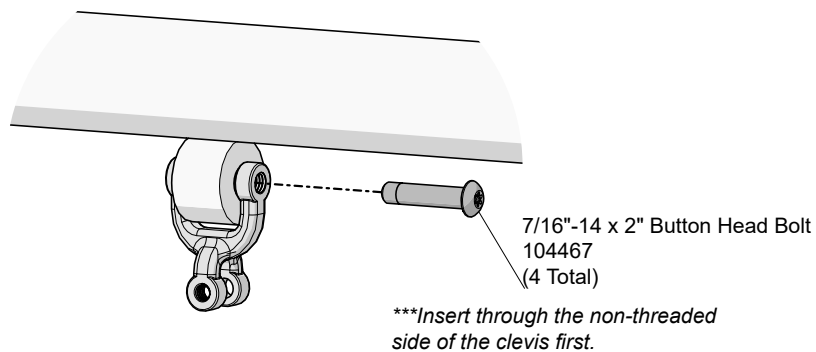
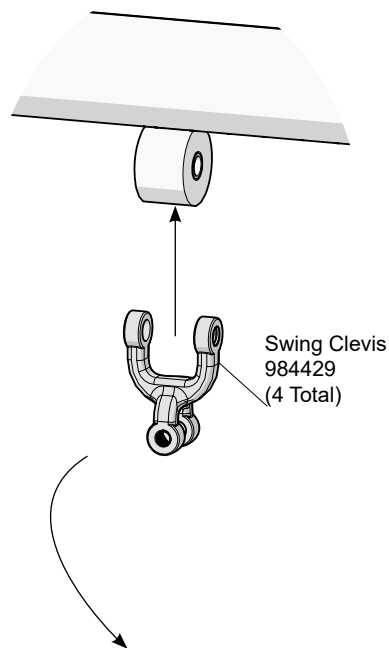


Detail B-2

Details B-1 and B-2
Step 5
Attach the top rail to the swing posts.



Installation Instructions



Detail C Step 7

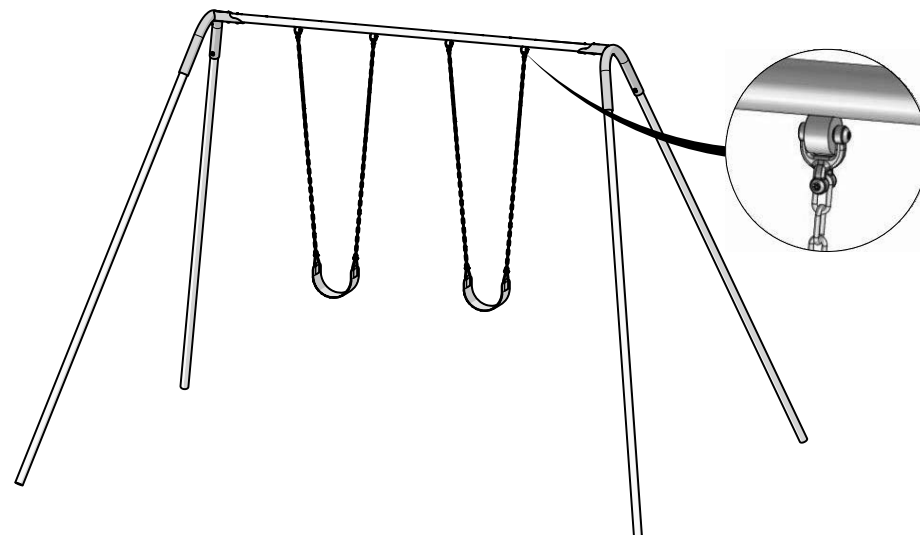
Attach the swing clevis to the top rail.

***Insert through the non-threaded
side of the clevis first.

3/8\" x 1-1/4\"
Button Head Bolt
w/ patch
BAE0667
(4 Total)

Detail D Step 8

Thread the bolt into the clevis for
attachment to a swing seat chain



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate footings as shown in the **Footing Details** on page 4 of this installation document.

Step 4: Attach the swing posts to the end yokes. See **Details A-1 and A-2**. Slide the swing legs into the end yokes until they bottom out and secure with set screws.

Step 5: Attach the top rail to the swing posts. See **Details B-1 and B-2**. Place the top rail onto the end yokes and align the holes. Attach the top rail as shown.

Step 6: Place the swing frame assembly into previously excavated footings. Square and level the swing frame assembly at specified footing depth. Top rail height shall be 96 in. (2438 mm) for ZZXX0823 **or** 120 in. (3048 mm) for ZZXX0825 as measured from top of the protective surfacing material level. See **Elevation View**. Fully tighten all bolts and set screws in accordance with torque specifications. See **Step 9**. Block and brace for concrete.

Fill the footings with concrete to within 2 in. (51 mm) of ground level as shown in the **Footing Detail**. Allow concrete to harden for 72 hours before proceeding with **Step 7**. After concrete has completely hardened, fill remainder of footing with dirt. Add protective surfacing material in accordance with the second page of these instructions.

Step 7: Attach the swing clevis to the top rail. See **Detail C**. Position a swing clevis over the tab on the top rail, and align the holes. Thread the bolt through the non-threaded side of the clevis.

Step 8: Thread bolt into the swing clevis. See **Detail D**. The clevis has a threaded and non-threaded side. Insert the bolt through the non-threaded side and thread into the other side of the clevis.

Note: The bolt will need to be removed to insert the chain for the swing seat.

Final Details.

Step 9: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

Step 10: Apply the Surfacing Warning labels to upper side corners. Labels are to be plainly visible according to current playground equipment guidelines.

Step 11: For areas complying with ASTM standard F1487 or the CSA Z-614, apply the age appropriate label to the equipment at eye level.

XX0823 - 8 ft. (2438 mm) 2-UNIT STANDARD SWING

PART NO.	DESCRIPTION	QTY.
104467	BOLT - 7/16"-14 x 2.00" BUTTON HEAD PART THREADED	4
984429	CLEVIS - SWING HANGER	4
AFR1994	CONNECTOR - STANDARD END YOKE	2
AFR1998	SWING TOP RAIL - 2.375" O.D. x 4.06" x 118.00"	1
APT0066	POST - 2.38" O.D. x 144.00" SWING	4
BAE0632	NUT - 3/8"-16 x 1.25 BARREL w/PATCH	4
BAE0667	BOLT - 3/8" x 1-1/4" BUTTON HEAD w/ NYLON PATCH	4
BAE06673	BOLT - 3/8"-16 x 2.00" BUTTON HEAD - SS	4
BAE0770	SCREW - 1/2"-20 X .50" SOCKET SET SS	4
BAE0910	TOOL - 1/4" SHORT HEX KEY WRENCH	1
BAE0922	TOOL - TT 45 L WRENCH	2
ALB0025	LABEL - AGE APPROPRIATE SHEET	1
BAB0032	LABEL - TAMPER RESISTANT SURFACE WARNING	1

Swing Seat assemblies sold separately

XX0825 - 10 ft. (3048 mm) 2-UNIT STANDARD SWING

PART NO.	DESCRIPTION	QTY.
104467	BOLT - 7/16"-14 x 2.00" BUTTON HEAD PART THREADED	4
984429	CLEVIS - SWING HANGER	4
AAC0555	POST - 2.38" O.D. x 166.00" SWING	4
AFR1994	CONNECTOR - STANDARD END YOKE	2
AFR1998	SWING TOP RAIL - 2.375" O.D. x 4.06" x 118.00"	1
BAE0632	NUT - 3/8"-16 x 1.25 BARREL w/PATCH	4
BAE0667	BOLT - 3/8" x 1-1/4" BUTTON HEAD w/NYLON PATCH	4
BAE0770	SCREW - 1/2"-20 x .50" SOCKET SET SS	4
BAE0910	TOOL - 1/4" SHORT HEX KEY WRENCH	1
BAE0922	TOOL - TT 45 L WRENCH	2
BAE06673	BOLT - 3/8"-16 x 2.00" BUTTON HEAD - SS	4
ALB0025	LABEL - AGE APPROPRIATE SHEET	1
BAB0032	LABEL - TAMPER RESISTANT SURFACE WARNING	1

Swing Seat assemblies sold separately



The world needs play.

For Customer Service, Call
800-233-8404 or
570-522-9800 OUTSIDE U.S.
1000 Buffalo Road • Lewisburg, PA 17837
www.playworld.com



Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
Set Screws: Snug tighten and tighten an additional full turn.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Castings

- Inspect the castings to insure they are properly secured to the component.
- Visually inspect the castings for cracks or breakage. If any damage is detected, barricade the equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Welds

- Inspect all welded joints. If any broken welds are detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Footings

- Inspect component to be solid in footing and secure. If any damage is detected, barricade equipment to prevent use until repair is completed.

Surfacing

- Refer to the specific surfacing maintenance detail sheet for additional information.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

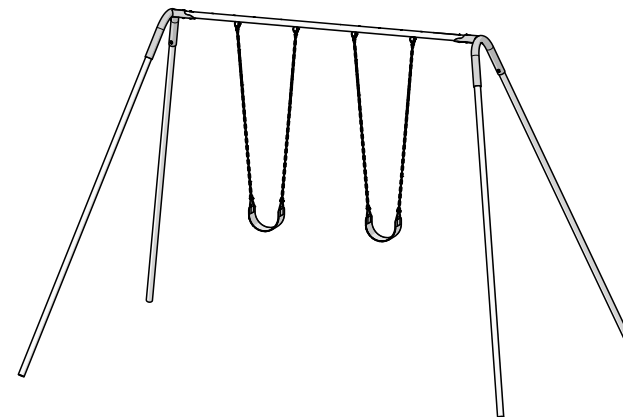
Equipment Maintenance

Playworld Systems®

Models ZZXX0823 and ZZXX0825

8 ft. (2438 mm) and 10 ft. (3048 mm)

Two Unit Standard Swing



PLAYWORLD
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www.playworld.com

Inspection Form

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST

	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect surfacing to insure proper depth and distribution.	High			
Inspect footing to insure support is secure and footing is not damaged.	Low			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			

Inspection Codes	
P = Pass	F = Fail
NA = Not Applicable	

Inspector: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___



Important ! Please Read Completely Before Beginning Installation. According to a report published by the U. S. Consumer Product Safety Commission (C.P.S.C.) 72% of all playground injuries result from accidental falls. With this in mind, this equipment is designed to fill the need for safe yet challenging play. In conjunction with design efforts to reduce the possibilities of injuries, this equipment **must** be installed “Step by Step” per our installation instructions. As a new owner you are responsible for the correct installation, safe use, and maintenance of your equipment.

Installation Guidelines

- Identify all parts and thoroughly read the assembly instructions before beginning construction.
- Refer to your playground equipment plan and footing diagram to assure the equipment purchased will fit into your selected site area. The use and no-encroachment zones around the play equipment shall be obstacle-free areas designated for unrestricted circulation.

(ASTM / CSA)

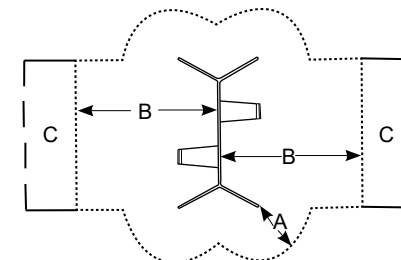
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- For enclosed infant swing seats, the use zone for swing equipment should extend to the front and rear of a single axis swing a minimum distance of twice the measurement from the pivot point to the swing seat surface measured from a point directly beneath the pivot on the supporting structure. The use zone on the ends of the swing (support structure) should extend a minimum of 72 inches (1829 mm). A no-encroachment zone is also required for installations in areas overseen by the Canadian Standards Association (C.S.A.). In addition to the use zone measurement on both sides of the top rail, this zone will extend an additional 72 inches (1829 mm) and may **not** be overlapped by the use or no-encroachment zones of adjacent play equipment. See diagram.

Belt/Rigid Seat Swing Zones

A = Side Use Zone
72 in. (1829 mm)

B = End Use Zone
Height of Pivot Point
from Surfacing x 2
Both Sides of Top Rail

C = No-encroachment Zone
72 in. (1829 mm)



- The use zone on either end of the swing (72 inches [1829 mm]) may be overlapped by the use zone on either end of the another swing (72 inches [1829 mm]). Swing zones on either side of the top rail may **not** be overlapped by the use zones of other play equipment.

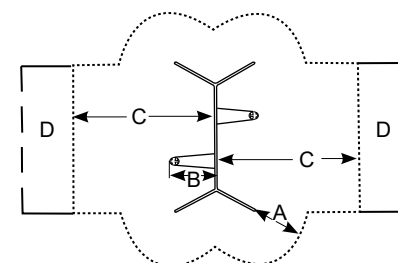
Infant Seat Swing Zones

A = Side Use Zone
72 in. (1829 mm)

B = Distance from Pivot Point
to Swing Seat Surface

C = End Use Zone: B x 2
Both Sides of Top Rail

D = No-encroachment Zone
72 in. (1829 mm)



Installation Instructions

(EN)

For areas conforming to the EN-1176 Standard, the impact area shall be determined by calculating the horizontal distance where the swing seat is at an 60° arc and adding the appropriate amount of distance based upon the type of protective surfacing. This distance shall be covered by protective surfacing on both sides of the top rail. The protective surfacing shall be appropriate for the maximum fall height of the swing. There is no difference in the calculation based on the type of swing seat.

The impact area on both sides of top rail = $(0.867 \times \text{Distance from pivot point to seat}) + \text{either } 1750 \text{ mm if unitary surfacing or } 2250 \text{ mm if loose-fill surfacing is used}$. There shall be a minimum corridor of 1750 mm centered on each swing seat for the length of the impact area.

Use Zones - EN Compliance

A = Width of the corridor centered on the swing seat
1750 mm

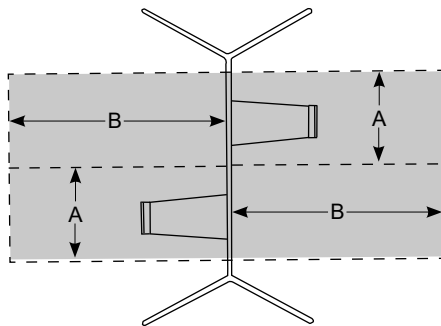
B = Length of the use zone on both sides of the top rail (2438 mm)

Infant Seats: 3290 mm for areas with unitary surfacing

or 3790 mm for areas covered with loose fill surfacing.

Belt seat or Rigid Seats: 3510 mm for with unitary surfacing

or 4010 mm for areas covered with loose fill surfacing



- Site layout is a critical part of the overall installation. Footings must be measured and marked accurately according to the footing diagram. A level and clear installation site is ideal.
- Good drainage around the structure and its supports is important. Inquire with local contractors for appropriate recommendations.
- After laying out all footings and before digging holes, be sure to inquire about underground utilities that may exist.
- Do not leave the job site unattended without making sure that all fastening hardware on all components are tightened according to tightening torque specifications listed on every installation guide. We also recommend roping off construction area and covering all holes that do not contain a piece of equipment with plywood or other suitable material.
- Excavate holes as shown in the footing detail. If a level and clear site cannot be obtained, adjust the depth of footing to maintain a level footing base. If soil conditions are loose or unstable, a larger diameter footing may be required. Inquire with local contractors for appropriate recommendations. Be sure concrete that might have splashed onto the unit is washed off before it dries. Allow concrete to harden 72 hours before allowing your structure to be used. **Assemble the entire structure before pouring concrete unless specifically instructed to do so in the installation instructions.**
- Insure that hard surface warning/Playworld Systems identification labels are properly affixed to the play equipment. Labels are to be plainly visible according to current playground equipment guidelines.
- **IMPORTANT!** Because accidental falls around your playground equipment can occur, Playworld Systems recommends that the area under and around the structure be covered with a resilient material such as sand, bark mulch, or wood chips. If loose fill surfacing materials are used, Playworld Systems recommends a depth of 12 in. (305 mm). An approved rubber safety matting can also be used. **Many protective surfacing materials can become compacted due to weather and use, which reduces their shock absorbency. It is strongly recommended that the surfacing be checked weekly and material added or replaced as necessary. Hard surfaces, such as asphalt, concrete and packed earth are not acceptable for use under playground equipment.**

Installation Instructions

- The entire area, under and around the playground equipment, must be covered with protective surfacing material. The impact attenuation of the protective surfacing under and around playground equipment should be rated to have a critical height value of at least the height of the highest accessible part of the equipment. The critical height for surfacing is to be rated in accordance with A.S.T.M. standard, designated F1292, A Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment. Contact the manufacturer of unitary surfacing materials (rubber matting) for the critical height rating for their products.

Tools Required: Playworld Systems supplies a service kit that contains commonly used hex key wrenches required to assemble your equipment. You may also need: shovel, digging iron, post hole digger, steel rake, wheelbarrow, garden hoe, water hose, tape measure, level, alignment tool, 3/8" ratchet with 9/16" socket, and 9/16" combination wrench.

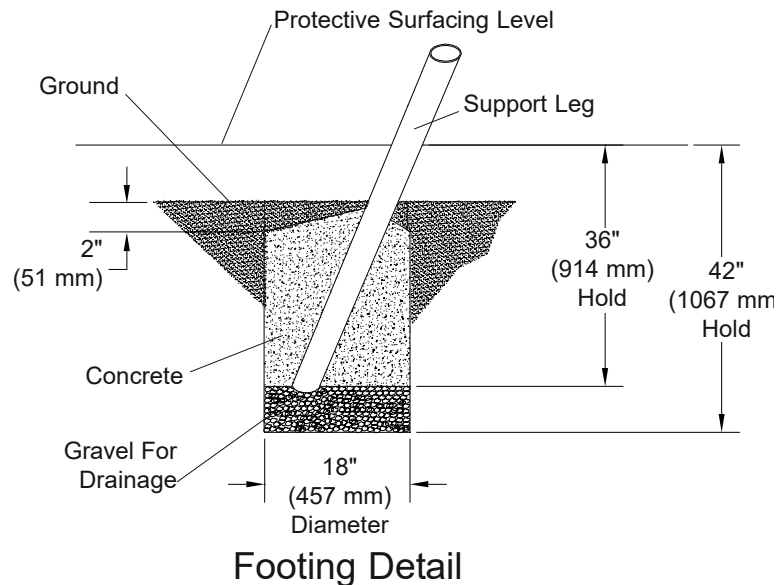
Maintenance

- Inadequate maintenance of equipment has resulted in injuries on the playground. Because the safety of playground equipment and its stability depends on good inspection and maintenance, **a comprehensive maintenance program must be developed for each playground and strictly followed.** All equipment must be inspected frequently for any potential hazards. Special attention must be given to moving parts and other components that can be expected to wear. Inspections must be carried out in a systematic manner by trained personnel. Any damaged or worn parts, or any other hazards identified during inspections must be repaired or replaced immediately. Complete documentation of all maintenance inspections and repairs must be retained.

Supervision Guidelines

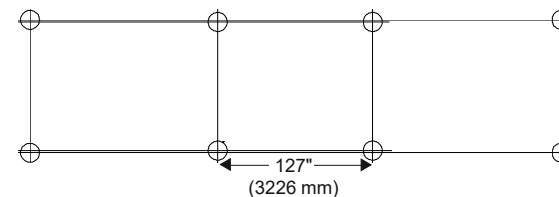
- Playworld Systems strongly recommends close supervision of the children as they play as well as intensive classroom and home instruction about safe behavior on playground equipment.
- Playground supervisors should be aware that not all playground equipment is appropriate for all children who may use the playground. Signs should be posted near the equipment indicating the recommended age of the users. Supervisors should direct children to equipment appropriate for their age.
- It is important that playground supervisors recognize that preschool-age children require more attentive supervision on playgrounds than older children.
- Do not permit the use of wet playground equipment. Wet equipment will inhibit necessary traction and gripping capabilities. Slips or falls could occur.
- Do not permit too many children on the same piece of equipment at the same time. It is suggested that children take turns.
- Constantly observe play patterns to discover possible hazardous play and suggest changes in equipment use or play patterns.

Installation Instructions

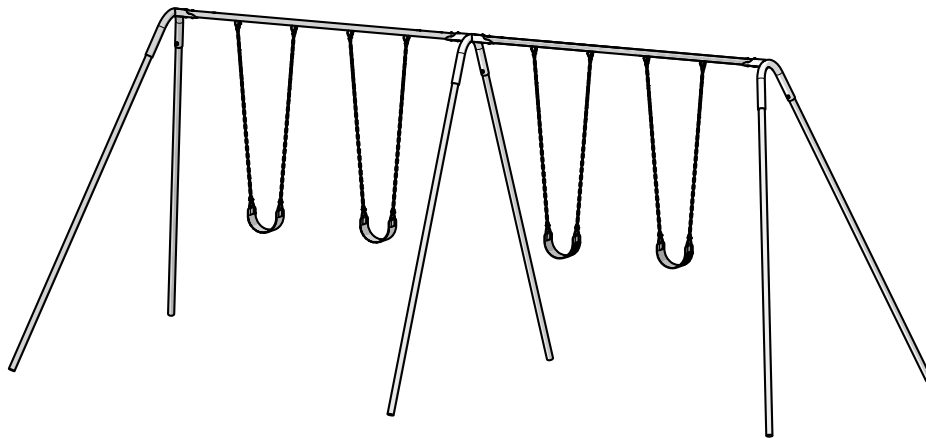


FOOTING NOTES

- Support post footing depth equals 42 in. (1067 mm) less the depth of the protective surfacing material. The post is designed to have 24" (610 mm) in concrete.
Example: If 12 in. (305 mm) of wood mulch is used for surfacing, the footing depth would be 30 in. (762 mm).
- All support posts and component support legs shall have either a factory-applied sticker with line, or factory-applied mark designating protective surfacing level on a clear and level installation site.
- If play structure is installed on uneven terrain, maintain support post mark at protective surfacing level at lowest grade. Adjust other footings accordingly. Support posts and all attaching decks and play components must be plumb and level.
- Do not encase bottom of support post in concrete. Place post directly on packed stone.
- The footings shown on Playworld Systems' documentation are recommendations based on historical performance in average soil conditions. Footing dimensions may be modified by the owner based on actual soil conditions.
For example:
 - If local soil is loose or unstable, a larger footing may be required.
 - If local soil is considered stable, such as bedrock, clay or hard packed earth, a smaller footing may be used. Before changing footing dimensions, we strongly recommend that the footings be reviewed and approved by a registered engineer.
- Base of footing must be below frost line.
- Assemble the entire structure before pouring concrete unless specifically instructed to do so in the individual component installation instructions.



Note: When adding extra Add-a-Bays to maintain 127" (3226 mm) between the footers for the straight center posts (see diagram above).



Assembly View (*representative model*)

Model	Height
ZZXX0824	8" (2438 mm)
ZZXX0827	10" (3048 mm)

Installation Instructions

Playworld Systems®

Models ZZXX0824 and ZZXX0827


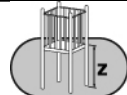


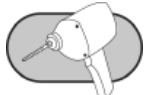

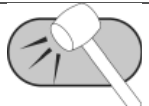
8 ft. (2438 mm) and 10 ft. (3048 mm)

Standard Duty Swing Add-a-Bay

Installation Preparation

Recommended Crew: Three (3) adults
 Installation Time: 1.5 man-hours
 Concrete Required: 0.26 cubic yard (0,20 cubic meters)
 Use Zone: Refer to information on pages 1 & 2
 User Group Age (years): ASTM/CSA: 2-12, EN: 2-14

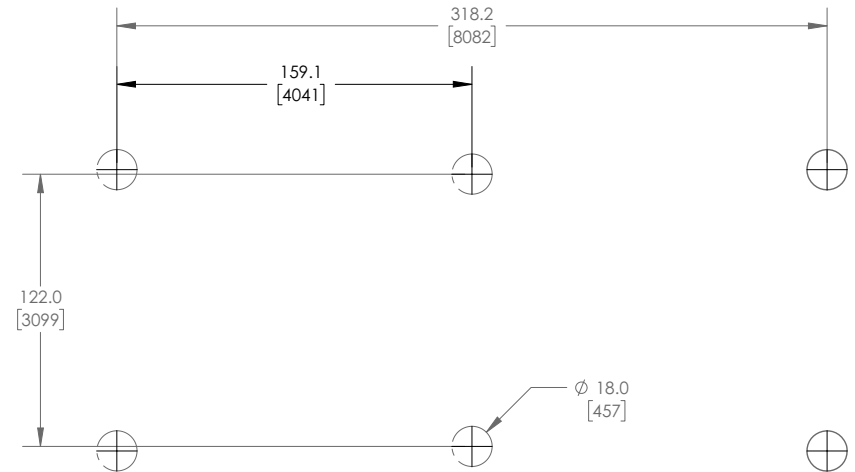
ICON KEY

	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Technical drawing of a trapezoidal structure, likely a cross-section of a road or a similar engineering component. The drawing shows a central horizontal section with a width of 325.8 [8275] and a height of 139.3 [3538]. The structure is symmetrical about a central vertical axis. The top and bottom edges are horizontal, while the side edges are slanted. The central horizontal section is divided into two parts by a vertical line. The side edges are shown with dashed lines, indicating they are hidden or internal features. The dimensions are given in millimeters, with the values in brackets representing the tolerance range.



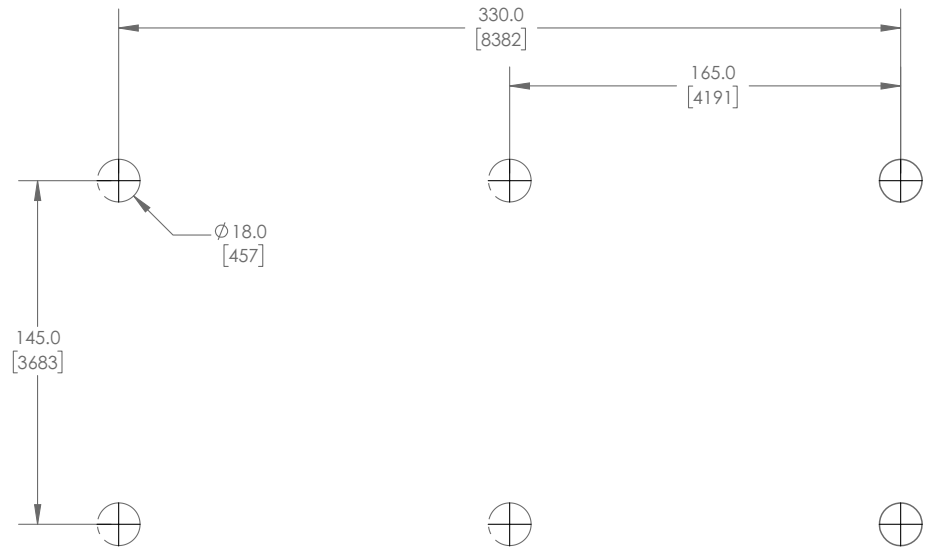
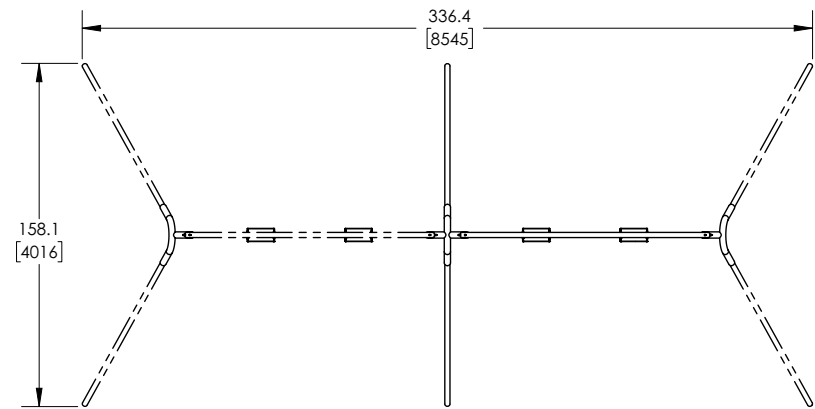
Page 6 of 16



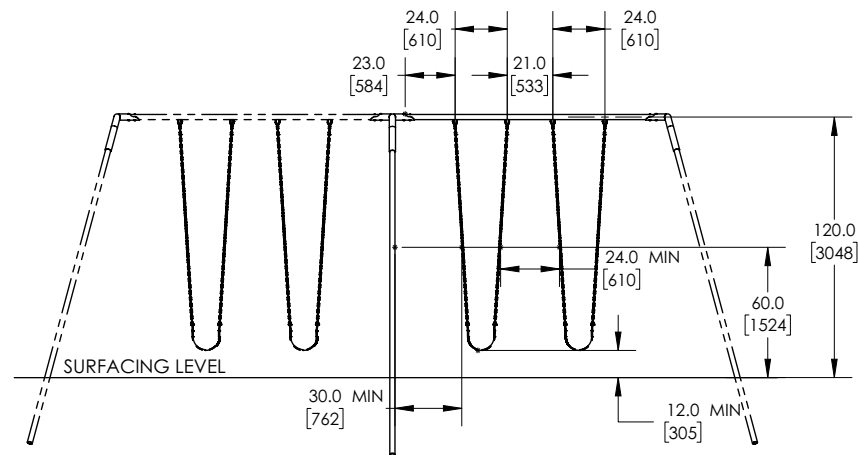
Installation Instructions

KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

Top View



Footing Diagram

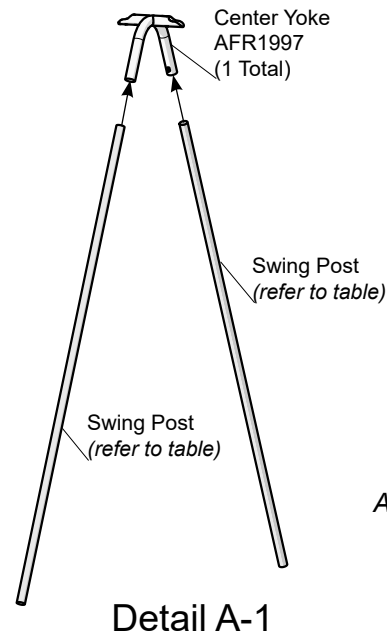


Elevation Views
ZZXX0827



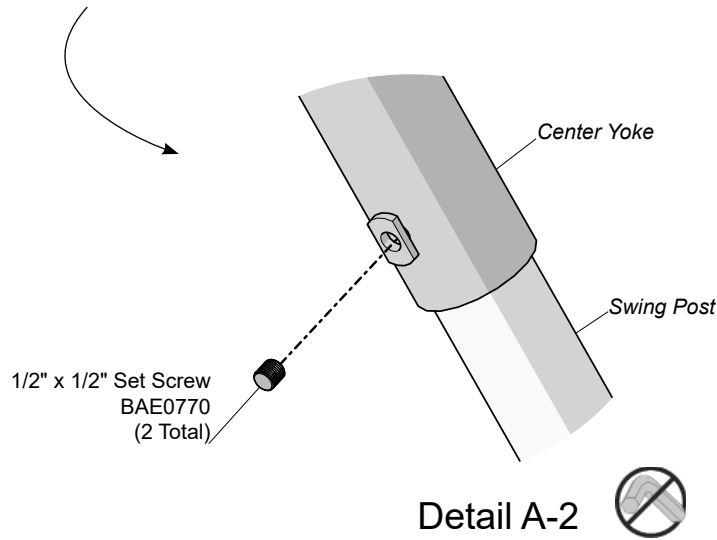
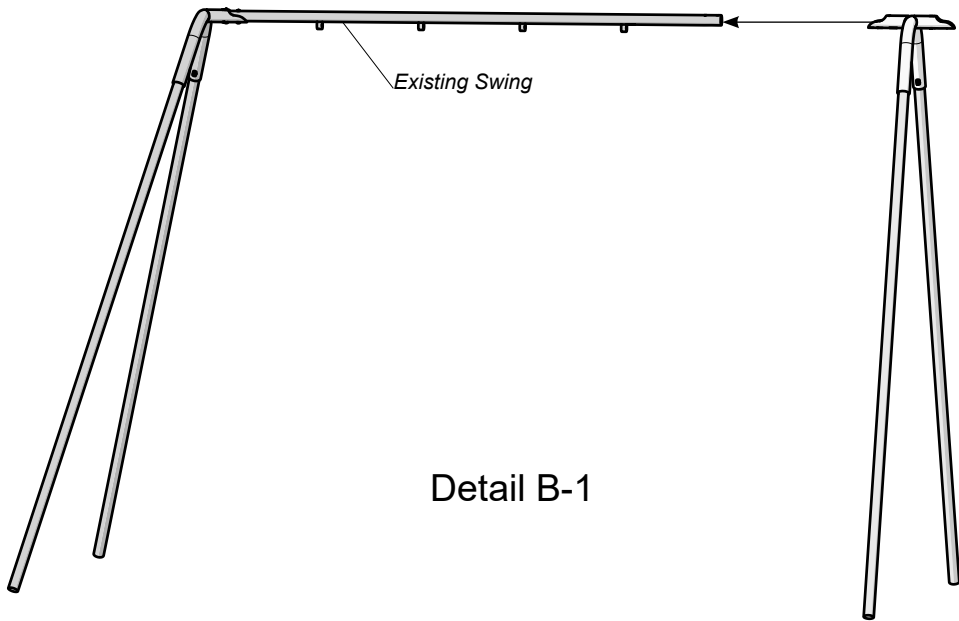
Installation Instructions

Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 12.

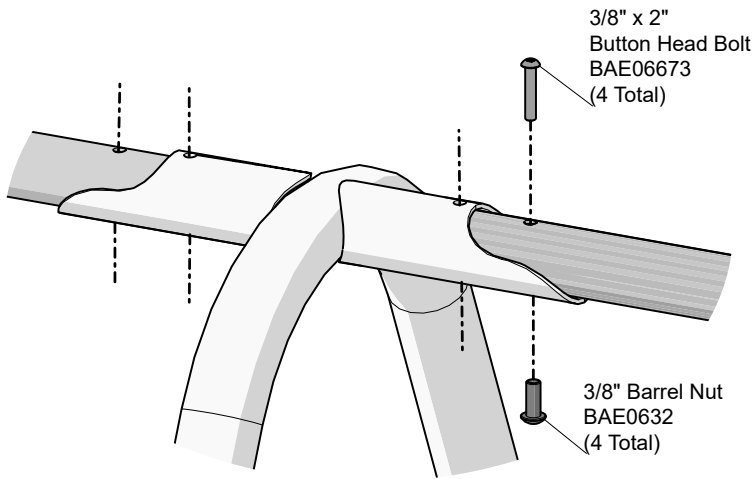
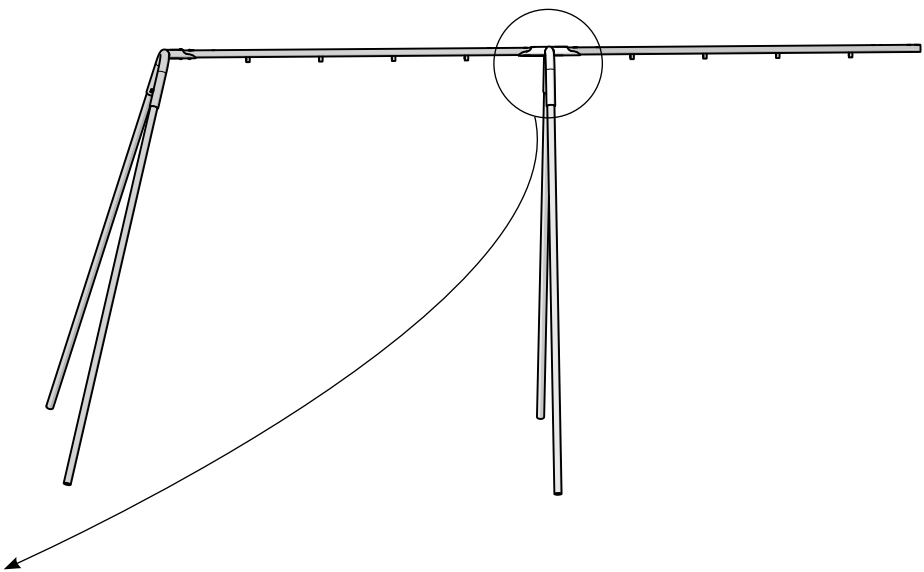
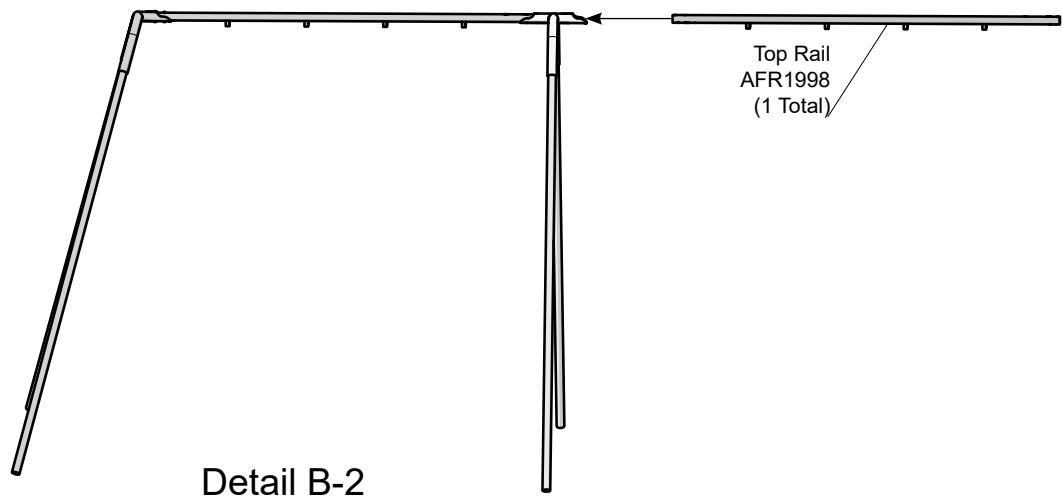


Model	Post Part Number
ZZXX0823	APT0066
ZZXX0825	AAC0555

Details A-1 and A-2
Step 5
Attach the swing posts to the center yoke.

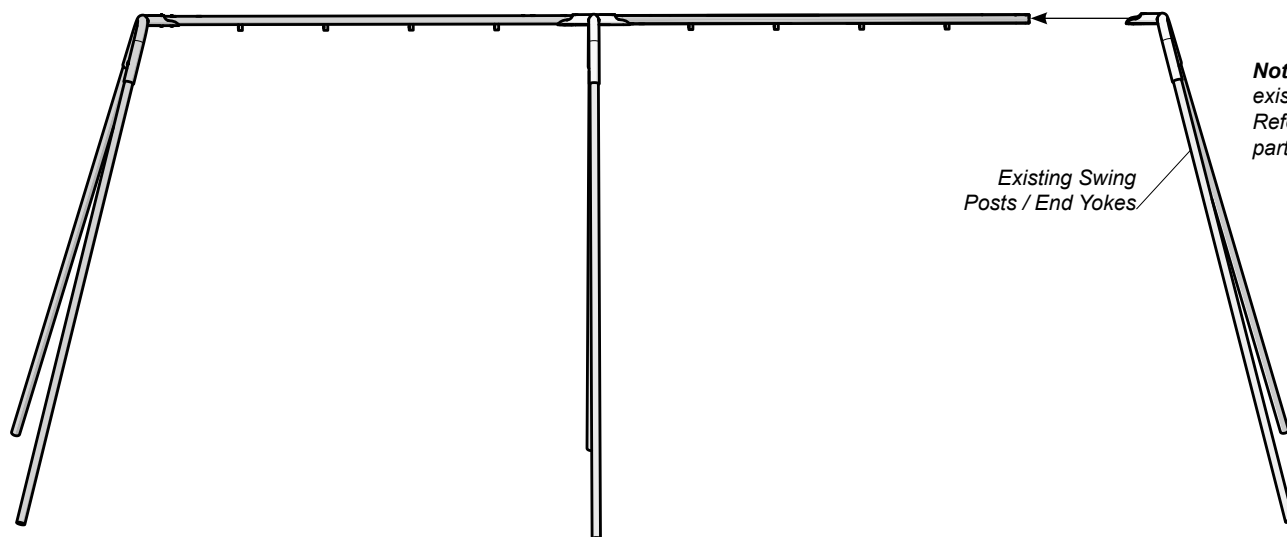


Installation Instructions



Details B-1, B-2 and B-3
Step 6
Attach the top rails to the center yoke.

Installation Instructions



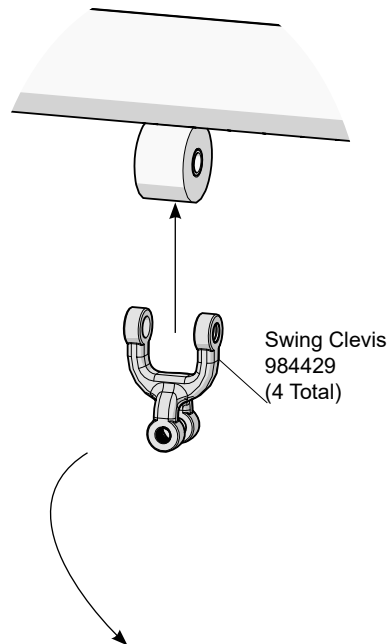
Note: Use the hardware from the existing swing for attachment. Refer to Detail B-3 for hardware part numbers.

Existing Swing
Posts / End Yokes

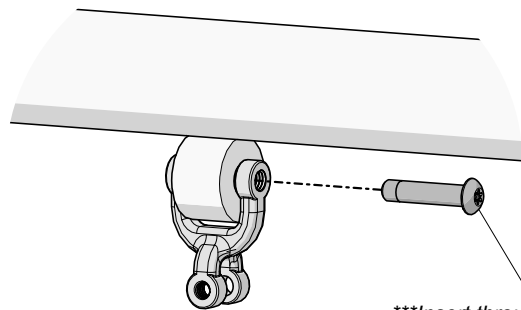
Detail C Step 7

Re-attach the existing swing posts / end yoke.

Installation Instructions



Swing Clevis
984429
(4 Total)



7/16"-14 x 2" Button Head Bolt
104467
(4 Total)

***Insert through the non-threaded
side of the clevis first.

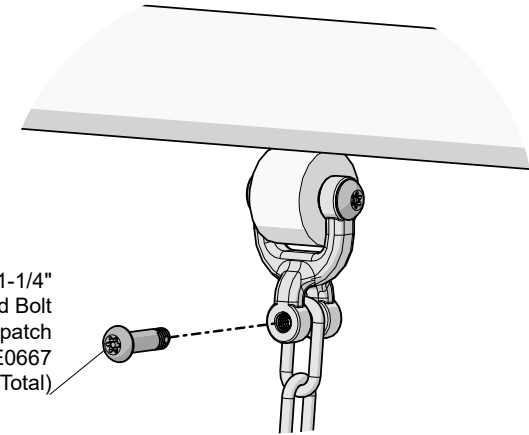


Detail D
Step 9

Attach the swing clevis to the top rail.

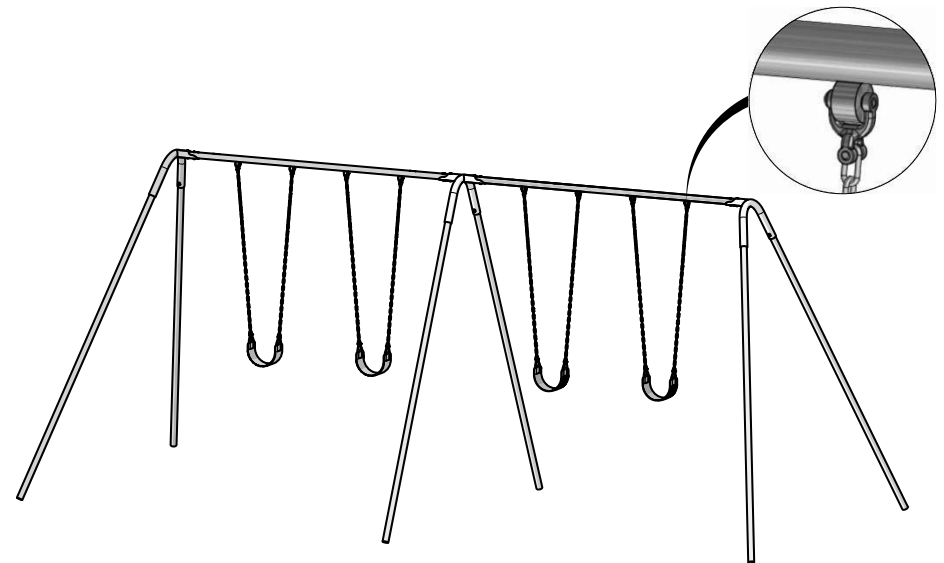
***Insert through the non-threaded
side of the clevis first.

3/8" x 1-1/4"
Button Head Bolt
w/ patch
BAE0667
(4 Total)



Detail E
Step 10

Thread the bolt into the clevis for
attachment to a swing seat chain



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Excavate footings as shown in the **Footing Details** on page 4 of this installation document.

Step 4: Remove, and reserve for reattachment, the hardware holding the end yoke to the top rail on the end to be moved. Dig out the legs and concrete and place them in the newly excavated holes.

Step 5: Attach the swing posts to the center yoke. See **Details A-1 and A-2**. Slide the swing legs into the center yoke until they bottom out and secure with set screws.

Step 6: Attach the top rails to the center yoke. See **Details B-1, B-2 and B-3**. Slide the center yoke assembly over the existing top rail. Slide the other swing top rail into the open end of the center yoke, and attach as shown.

Step 7: Re-attach the existing swing posts / end yoke. See **Detail C**. Using the hardware removed in Step 4, re-attach the swing posts / end yoke.

Step 8: Square and level the swing frame assembly at specified footing depth. Top rail height shall be 96 in. (2438 mm) for ZZXX0824 **or** 120 in. (3048 mm) for ZZXX0827 as measured from top of the protective surfacing material level. See **Elevation View**. Fully tighten all bolts and set screws in accordance with torque specifications. See **Step 11**. Block and brace for concrete.

Fill the footings with concrete to within 2 in. (51 mm) of ground level as shown in the **Footing Detail**. Allow concrete to harden for 72 hours before proceeding with **Step 9**. After concrete has completely hardened, fill remainder of footing with dirt. Add protective surfacing material in accordance with the second page of these instructions.

Step 9: Attach the swing clevis to the top rail. See **Detail D**. Position a swing clevis over the tab on the top rail, and align the holes. Thread the bolt through the non-threaded side of the clevis.

Step 10: Thread bolt into the swing clevis. See **Detail E**. The clevis has a threaded and non-threaded side. Insert the bolt through the non-threaded side and thread into the other side of the clevis.

Note: The bolt will need to be removed to insert the chain for the swing seat.

Final Details.

Step 11: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Set Screws - Snug tighten and tighten an additional full turn.

Step 12: Apply the Surfacing Warning labels to upper side corners. Labels are to be plainly visible according to current playground equipment guidelines.

Step 13: See Swing Seat Installation Instruction sheet for swing seat attachment. Swing seats are ordered separately.

Bill of Materials

XX0824 - 8 ft. (2438 mm) STANDARD DUTY SWING ADD-A-BAY

PART NO.	DESCRIPTION	QTY.
104467	BOLT - 7/16"-14 x 2.00" BUTTON HEAD PART THREADED	4
984429	CLEVIS - SWING HANGER	4
AFR1997	CONNECTOR STANDARD CENTER YOKE	1
AFR1998	SWING TOP RAIL - 2.375" O.D. x 4.06" x 118.00"	1
APT0066	POST - 2.38" O.D. x 144.00" SWING	2
BAE0632	NUT - 3/8"-16 x 1.25 BARREL w/PATCH	4
BAE0667	BOLT - 3/8" x 1-1/4" BUTTON HEAD w/NYLON PATCH	4
BAE06673	BOLT - 3/8"-16 x 2.00" BUTTON HEAD - SS	4
BAE0770	SCREW - 1/2"-20 x .50" SOCKET SET SS	2
BAE0910	TOOL - 1/4" SHORT HEX KEY WRENCH	1
BAE0922	TOOL - TT 45 L WRENCH	2
BAB0032	LABEL - TAMPER RESISTANT SURFACE WARNING	1

Swing Seat assemblies sold separately

XX0827 - 10 ft. (3048 mm) STANDARD DUTY SWING ADD-A-BAY

PART NO.	DESCRIPTION	QTY.
104467	BOLT - 7/16"-14 x 2.00" BUTTON HEAD PART THREADED	4
984429	CLEVIS - SWING HANGER	4
AAC0555	POST - 2.38" O.D. x 166.00"	4
AFR1997	CONNECTOR STANDARD CENTER YOKE	1
AFR1998	SWING TOP RAIL - 2.375" O.D. x 4.06" x 118.00"	1
BAE0632	NUT - 3/8"-16 x 1.25 BARREL w/PATCH	6
BAE0667	BOLT - 3/8" x 1-1/4" BUTTON HEAD w/NYLON PATCH	4
BAE0770	SCREW - 1/2"-20 x .50" SOCKET SET SS	2
BAE0910	TOOL - 1/4" SHORT HEX KEY WRENCH	1
BAE0922	TOOL - TT 45 L WRENCH	2
BAE06673	BOLT - 3/8"-16 x 2.00" BUTTON HEAD - SS	6
AFR1994	CONNECTOR - STANDARD END YOKE	1
BAB0032	LABEL - TAMPER RESISTANT SURFACE WARNING	1

Swing Seat assemblies sold separately



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Fasteners

- Inspect for loose fasteners.
Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
Set Screws: Snug tighten and tighten an additional full turn.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Castings

- Inspect the castings to insure they are properly secured to the component.
- Visually inspect the castings for cracks or breakage. If any damage is detected, barricade the equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Welds

- Inspect all welded joints. If any broken welds are detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.

Footings

- Inspect component to be solid in footing and secure. If any damage is detected, barricade equipment to prevent use until repair is completed.

Surfacing

- Raking loose-fill surfacing material back into dug out and displaced areas is necessary at frequent intervals to maintain the impact absorption qualities.
- Loose-fill materials must be replenished when the surface level drops below the minimum level to maintain proper depth in accordance with your equipment's critical fall height.
- Eliminate areas of standing water by improving site drainage.
- Contact manufacturer of unitary surfacing material for specific instructions and product to use for cleaning spots and stains.
- Contact manufacturer of unitary surfacing material if rips, tears or missing material is noticed. Follow the manufacturer instructions regarding the appropriate actions necessary for the repair.

Labels

- Inspect all applied labels to ensure labels are secure, not faded or damaged. Contact your local representative if replacement labels are needed.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

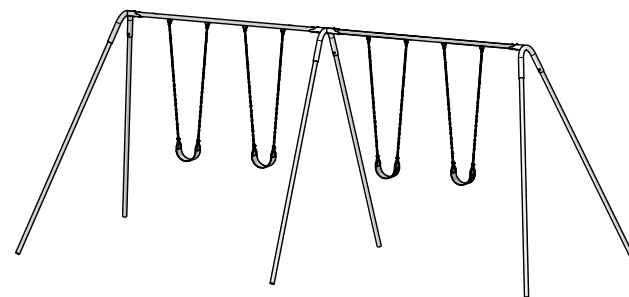
Equipment Maintenance

Playworld Systems®

Models ZZXX0824 and ZZXX0827

8 ft. (2438 mm) and 10 ft. (3048 mm)

Standard Duty Swing Add-a-Bay



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www.playworld.com

Inspection Form

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST

	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect surfacing to insure proper depth and distribution.	High			
Inspect footing to insure support is secure and footing is not damaged.	Low			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			

Inspection Codes
P = Pass **F** = Fail
NA = Not Applicable

Inspector: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___



Installation Instructions

Playworld Systems®

Models XX0891, XX0892 and XX0893

Accessible Swing Seat to 7 ft. (2134 mm), 8 ft. (2438 mm) and 10 ft. (3048) Top Rail

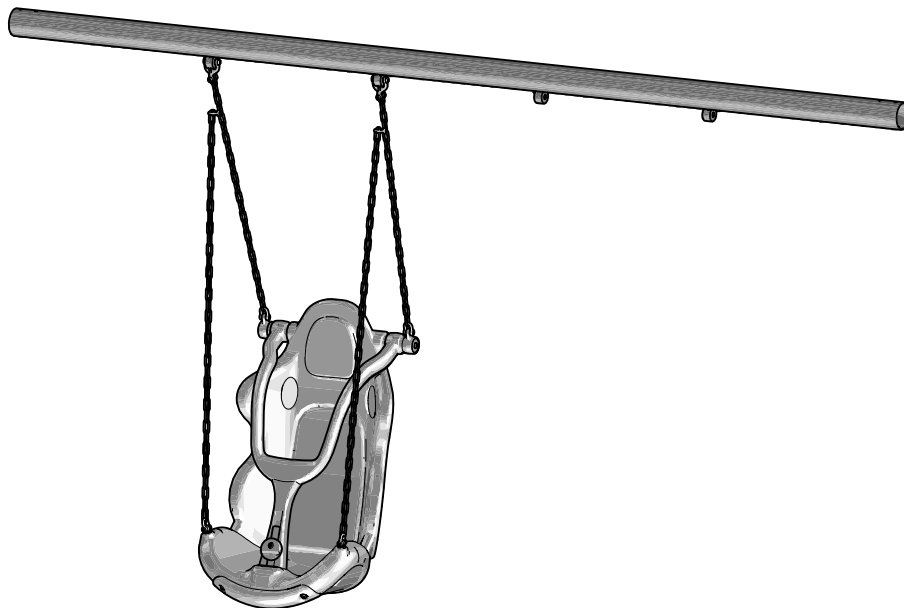
Installation Preparation

Recommended Crew: One (1) adult

Installation Time: 0.5 man-hour

Use Zone: Refer to swing seat instructions


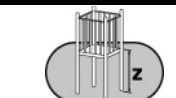





User Group Age (years): ASTM: 2-12, CSA: 1.5-12



Assembly View

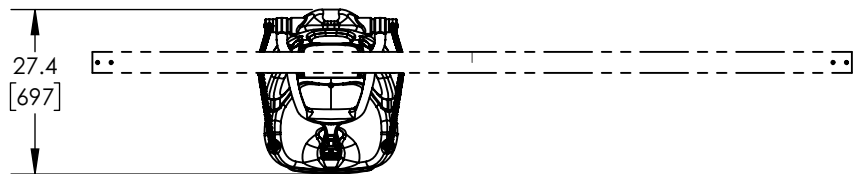
Model Number	Top Rail Height
ZZXX0891	7 ft. (2135 mm)
ZZXX0892	8 ft. (2440 mm)
ZZXX0893	10 ft. (3050 mm)

ICON KEY

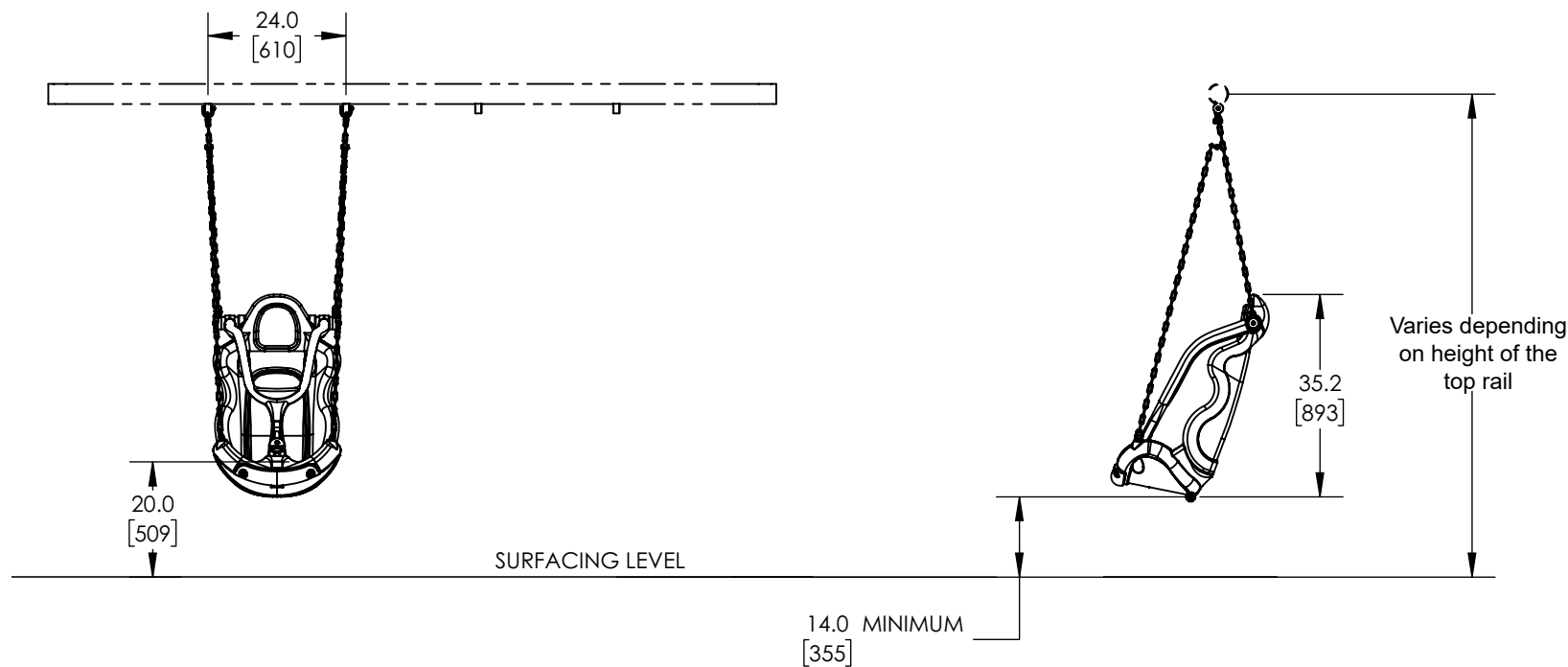
	Fully Tighten Hardware		Critical Fall Height
	Do Not Fully Tighten Hardware		Pour Concrete
	Drill		Dig Footing Holes
	Hammer		

Installation Instructions

Top View



KEY	
Position	Unit of Measurement
Top #	Inches
Bottom #	[Millimeters]

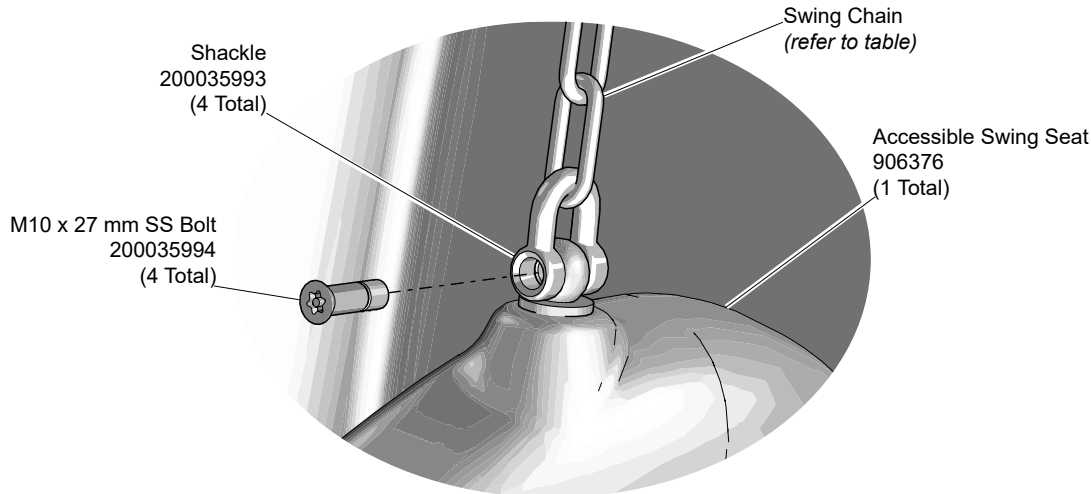


Elevation Views



Installation Instructions

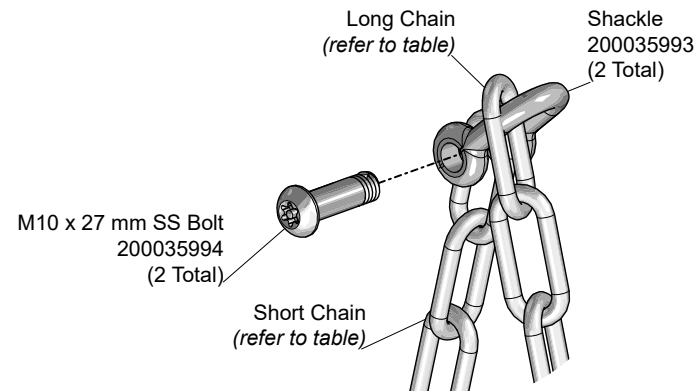
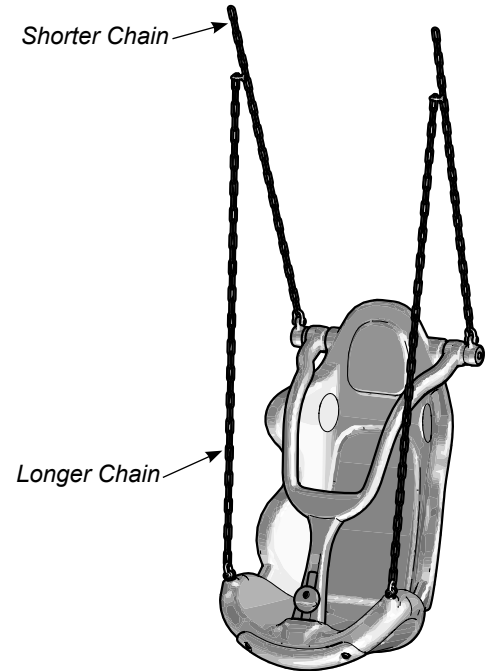
Follow the details in alphabetical order. For clarification, each detail references the step description. The step descriptions start on page 5.



Detail A
Step 3

Attach the chains to the swing seat.

Model Number	Longer Chain	Shorter Chain
ZZXX0891	ACN0050	ACN0053
ZZXX0892	ACN0226	ACN0227
ZZXX0893	ACN0224	ACN0225



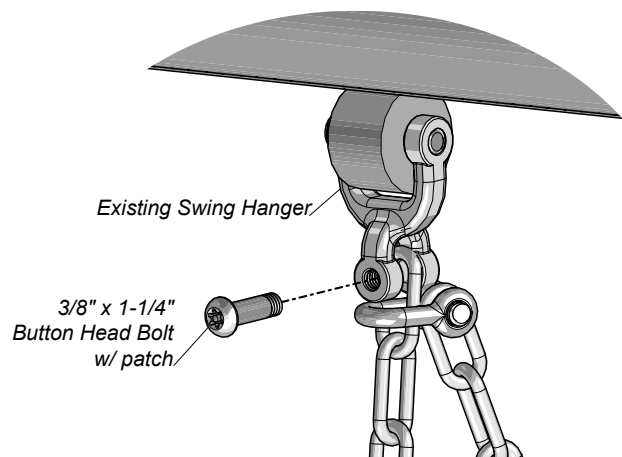
Detail C
Step 5

Connect the chains together.

Note: If using the 5" O.D. arch swing, put the shackle in the second chain link from the top.



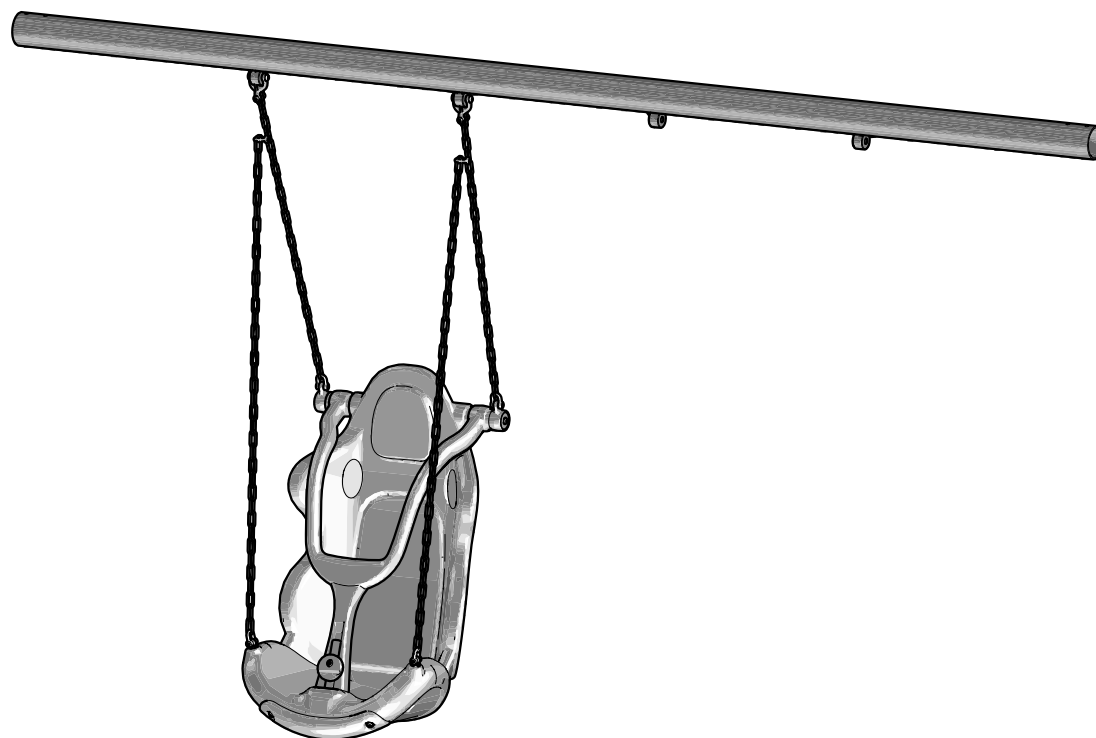
Installation Instructions



Detail D

Step 6

Attach the swing seat assembly to the swing hangers.



Installation Instructions

Notes Before You Begin: Do not over tighten bolts during assembly, only snug tighten them until assembly is complete.

Carefully read and understand these installation instructions before you begin.

Step 1: Before attempting to assemble your equipment, please review all installation information carefully. Should you experience any difficulty during the installation process, please call us at the phone number shown on the last page of these instructions.

Step 2: Separate and identify all components and hardware.

Step 3: Attach the chains to the accessible swing seat. See **Detail A**. Insert a U-bolt through the chain and into the openings on the swing, attach as shown.

Step 4: Connect the chains together. See **Detail B**. Thread a shackle through the last link of one of the longer "front" chains. Insert the last link of the shorter chain into the open end of the shackle. Insert a bolt through the unthreaded side of the shackle, *through the last link* of the shorter chain, and thread into the opposite side of the shackle. Repeat for the other set of chains.

Step 5: Attach the swing seat assembly to the swing hangers. See **Detail D**. Remove the 1-1/4" bolt from the swing hanger clevis with the included hex wrench. Select the swing seat and place the last link of the longer chain into the open end of the clevis. Re-insert the bolt through the unthreaded side of the clevis, *through* the chain link, and thread into the opposite side of the clevis.

Final Details.

Step 6: Plumb and level the component. Tighten **all** fasteners. Fully tighten all fasteners according to tightening torque specifications.

Torque Specifications:

Bolts and nuts - Snug tighten and then tighten an additional one half turn.

Step 7: Apply the age appropriate label to the swing seat.

Usage Instructions:

To open the yoke - Hold the bottom of the swing with one hand by the bumper. Press the yoke backwards with the other hand by the latch grip, and without releasing pressure, move the latch grip upwards until the bar slides to the top of the groove and pull the yoke toward you.

To close the latch - Pull the yoke down, and hold the bottom of the swing by the bumper. Grab the yoke by the latch grip and move it up until the bar reaches the top of the groove. Without releasing, push the yoke back until the front plate reaches the latch stop plate and release pressure on the latch grip. Move the yoke until the front plate goes inside of the slot in the stop plate and check that the latch is engaged.

XX0891 - ACCESSIBLE SWING SEAT TO 7 ft. TOP RAIL

PART NO.	DESCRIPTION	QTY.
906376	INCLUSIVE RACING SEAT ASSEMBLY-MREC	1
200035993	SHACKLE "D" STYLE 41 mm 300 S.S.(SMALL)	6
200035994	BOLT M10 x 1.5 x 27 mm 300 SS 6-LOBE(SM)	6
ACN0050	CHAIN - 36.47" x # 4/0	2
ACN0053	CHAIN - 51.87" x # 4/0	2
ASY0560	LABEL KIT - 2-12 YEARS ACC. SWING - ASTM	1

XX0892 - ACCESSIBLE SWING SEAT TO 8 ft. TOP RAIL

PART NO.	DESCRIPTION	QTY.
906376	INCLUSIVE RACING SEAT ASSEMBLY-MREC	1
200035993	SHACKLE "D" STYLE 41 mm 300 S.S.(SMALL)	6
200035994	BOLT M10 x 1.5 x 27 mm 300 SS 6-LOBE(SM)	6
ACN0226	CHAIN - 62.99" x # 4/0	2
ACN0227	CHAIN - 44.88" x # 4/0	2
ASY0560	LABEL KIT - 2-12 YEARS ACC. SWING - ASTM	1

XX0893 - ACCESSIBLE SWING SEAT TO 10 ft. TOP RAIL

PART NO.	DESCRIPTION	QTY.
906376	INCLUSIVE RACING SEAT ASSEMBLY-MREC	1
200035993	SHACKLE "D" STYLE 41 mm 300 S.S.(SMALL)	6
200035994	BOLT M10 x 1.5 x 27 mm 300 SS 6-LOBE(SM)	6
ACN0224	CHAIN - 86.62" x # 4/0	2
ACN0225	CHAIN - 69.89" x # 4/0	2
ASY0560	LABEL KIT - 2-12 YEARS ACC. SWING - ASTM	1

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800-233-8404 or
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1000 Buffalo Road • Lewisburg, PA 17837
www.playworld.com

Fasteners

- Inspect for loose fasteners. Tightening torque specifications are:
Bolts and Nuts: Snug tighten and tighten an additional one-half turn.
- Inspect for missing, worn or broken fasteners. If any missing, worn or broken fasteners are found, refer to the installation instructions for proper replacement fastener. If any damage is detected, barricade equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Plastic Parts

- Inspect all plastic surfaces for sharp points, cracks or jagged edges. If any damage is detected and is determined to be unsafe, barricade equipment to prevent use until repair is completed. Minor burrs or sharp edges may be removed by using a sharp utility knife or block plane to remove sharp burr.

Castings

- Inspect the aluminum castings to insure they are properly secured to the component.
- Visually inspect the castings for cracks or breakage. If any damage is detected, barricade the equipment to prevent use until repair is completed. Contact your sales representative immediately for a replacement part.

Finish

- Inspect metal parts for finish damage.
To repair painted surfaces, sand damaged area with sandpaper and wipe clean. Mask area and paint with primer and allow to dry. Paint primed area with color-matching paint and allow to dry. Recoat area with color-matching paint if required. Drying time is approximately 8 hours between coats.
To repair the deck/stair/ladder/step-up bracket coating, contact the Playworld Systems' Customer Service Department for a coating repair touch-up kit.

Footings

- Inspect component to be solid in footing and secure. If any damage is detected, barricade equipment to prevent use until repair is completed.

Surfacing

- Raking loose-fill surfacing material back into dug out and displaced areas is necessary at frequent intervals to maintain the impact absorption qualities.
- Loose-fill materials must be replenished when the surface level drops below the minimum level to maintain proper depth in accordance with your equipment's critical fall height.
- Eliminate areas of standing water by improving site drainage.
- Contact manufacturer of unitary surfacing material for specific instructions and product to use for cleaning spots and stains.
- Contact manufacturer of unitary surfacing material if rips, tears or missing material is noticed. Follow the manufacturer instructions regarding the appropriate actions necessary for the repair.

Labels

- Inspect all applied labels to ensure labels are secure, not faded or damaged. Contact your local representative if replacement labels are needed.

Replacement Parts

- Refer to your installation instructions to obtain replacement part number.
- Contact your sales representative or call Playworld Systems' Customer Service for a replacement part.

Equipment Maintenance Playworld Systems®

Models XX0891, XX0892, XX0893
Accessible Swing Seat
w/ Galvanized Chain
to 7 ft (2134 mm), 8 ft. (2438 mm),
and 10 ft. (3048) Top Rail



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Inspection Form

- Be sure that you are using a copy of this Inspection Form and not your original.
- Use the Inspection Codes listed below and record condition of equipment at time of examination on the Inspection Checklist.
- Document any item from the Inspection Checklist that will require maintenance along with any corrective action on the Maintenance Schedule.
- Be sure to include appropriate dates and signatures on each section to properly document maintenance procedure.

Preventive Maintenance ... for Safety's Sake!

INSPECTION CHECKLIST

	Frequency	Inspection Code	Date	Date Repairs Completed
Inspect plastic parts for damage.	Medium			
Inspect surfacing to insure proper depth and distribution.	High			
Inspect metal parts for structural and finish damage.	Medium			
Inspect for loose, missing, worn, or broken fasteners.	High			

Inspection Codes
P = Pass **F** = Fail
NA = Not Applicable

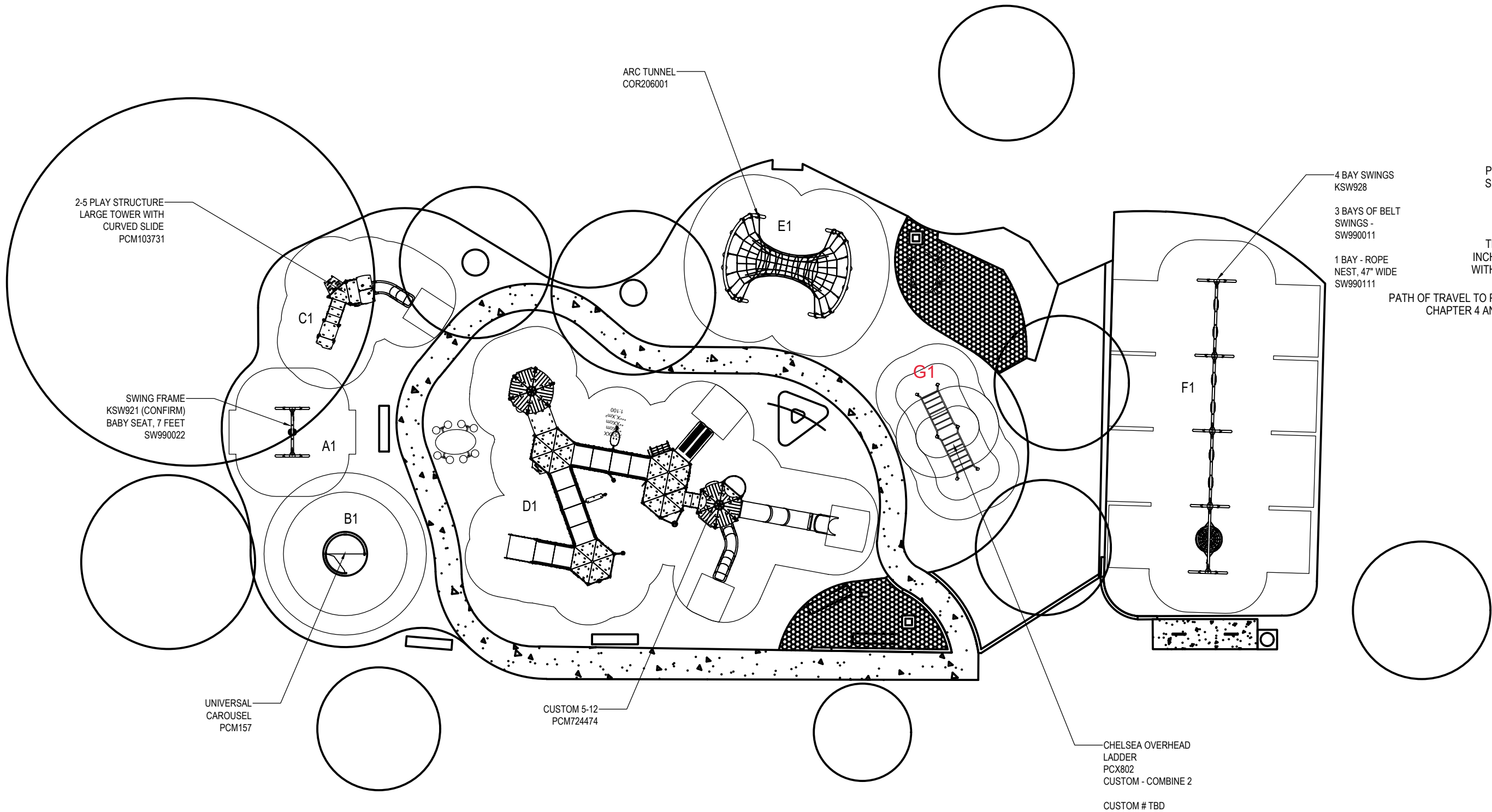
Inspector: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___

MAINTENANCE SCHEDULE

Item in Question	Description of Problem	Corrective Action	Date

Repairer: Name (Please Print) _____ Signature: _____ Date: ___ / ___ / ___





EXPOSED TREE ROOTS MUST REMAIN OUTSIDE OF USE ZONE.

BRANCHES MUST BE AT LEAST 84-INCHES FROM THE HIGHEST DESIGNATED PLAY SURFACE.

SHADE MUST BE AT LEAST 84-INCHES ABOVE HIGHEST DESIGNATED PLAY SURFACE.

PLAYGROUND SITE MUST MEET SURFACING REQUIREMENTS AS PER ASTM F1292

TRANSFER PLATFORM MUST BE 11-18 INCHES HIGH, MIN. 24" WIDE, AND 14" DEEP WITH A CLEAR GROUND SPACE OF 30" X 48"

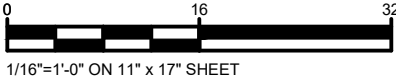
PATH OF TRAVEL TO PLAY AREA IS REQUIRED PER ADA WITH CHAPTER 4 AND 1008.2 ACCESSIBLE ROUTES.

#	Product Number	Product Name	M.F.H.	Count
A	KSW921-CUSTOM_20159868	1 infant		1
B	PCM157-xx01	Universal Carousel	1' 3"	1
C	PCM103731-xx01	Large Play Tower with curved Slide	3' 10"	1
D	PCM724474-US	custom ramp structure		1
E	COR206001-xx01	Arc Tunnel	8' 2"	1
F	KSW928-CUSTOM_20159876	6 belt, 1 basket	7'-11"	1

G PCX760042-overhead ladder 1

Stratton Park

Site Plan



MANUFACTURER'S SHOP DRAWING:

FOR USE BY CONTRACTOR, ENGINEER, OR DESIGN PROFESSIONAL OF RECORD. SEE SIGNED SALES PROPOSAL FOR COMPLETE SCOPE TO BE PROVIDED BY KOMPAN OR REPRESENTING AGENCY. CONFIRM FINAL PLAN AND SCOPE WITH KOMPAN SALES REP OR PROJECT MANAGER PRIOR TO USE FOR REVIEW, PERMITTING, OR CONSTRUCTION.

TO BE READ CONTINGENTLY WITH KOMPAN'S STANDARDS FOR SITE PREPARATION, MATERIALS AND INSTALLATION PROCESSES. PROVIDED AFTER EQUIPMENT PURCHASE. A COMPLIANT PLAYGROUND TO KOMPAN'S STANDARDS MUST SATISFY ALL REQUIREMENTS IN THE CODE OF CONDUCT.

SLAB BY OTHERS UNLESS OTHERWISE NOTED. FOR SURFACE MOUNT OPTIONS, THE CONCRETE REQUIREMENTS MAY BE UP TO 51/2" OF 3,500 PSI MINIMUM COMPRESSIVE STRENGTH. CONTACT KOMPAN FOR SPECIFIC PRODUCT REQUIREMENTS. ALL COMPOSITE STRUCTURES SHOWN REQUIRE A SITE GRADE OF 2% MAXIMUM, 1% OPTIMAL. SPECIFICATIONS FOR EACH KOMPAN STRUCTURE MAY BE FOUND AT KOMPAN.COM/KOMPANMASTER

DIMENSIONS OF PLAY AREA, SIZE AND ORIENTATION, LOCATIONS OF ALL EXISTING UTILITIES, EQUIPMENT AND SITE FURNISHINGS TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION.

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REVIEW BY:	DATE:	SHEET:
DESIGN	04/01/22	L2.0
REPS NAME:	DRAWN BY:	
EniWal	MirRig	
REV. NO.	REV. BY:	REVISION NOTES:
-	-	-

LAYOUT IS IN ACCORDANCE WITH ASTM F1487

PCMS-CUSTOM STRUCTURE

PCM724474

Date

Signature

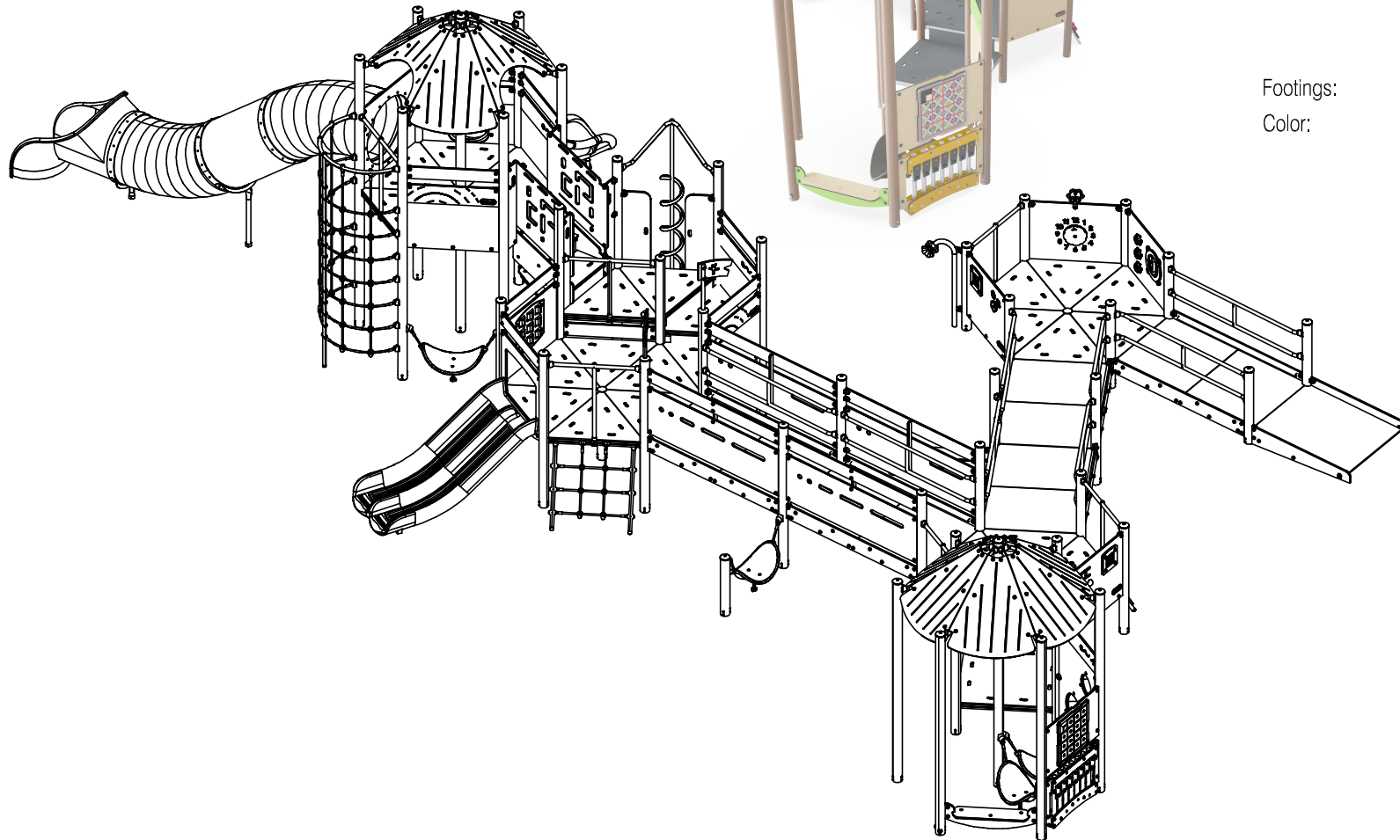
KOMPAN!

PCMS-CUSTOM

724474

20211122 ASC

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Footings:

90 cm

Color:

Powder coated
RAL8011 (-299)

PCMS-CUSTOM STRUCTURE

PCM724474

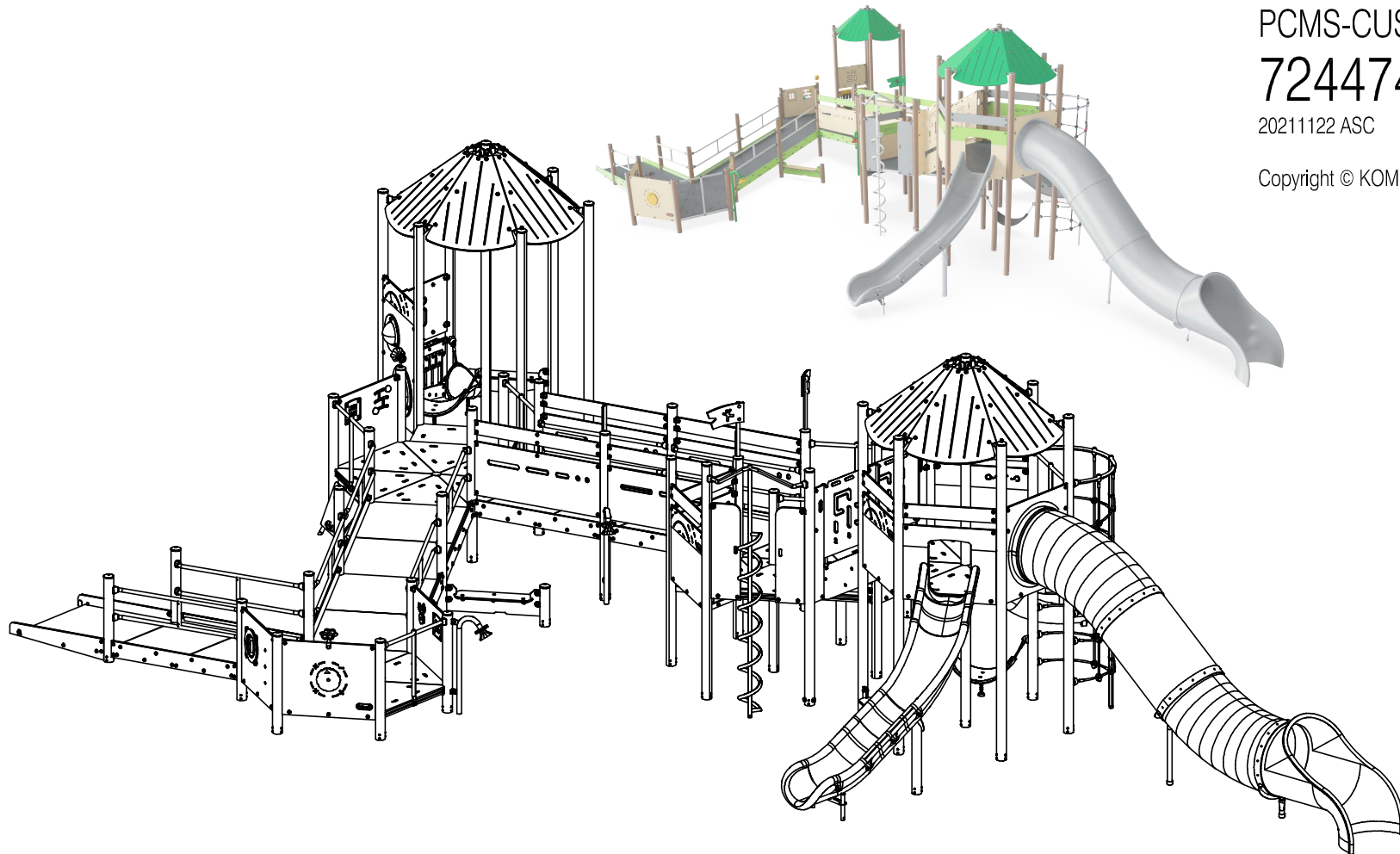
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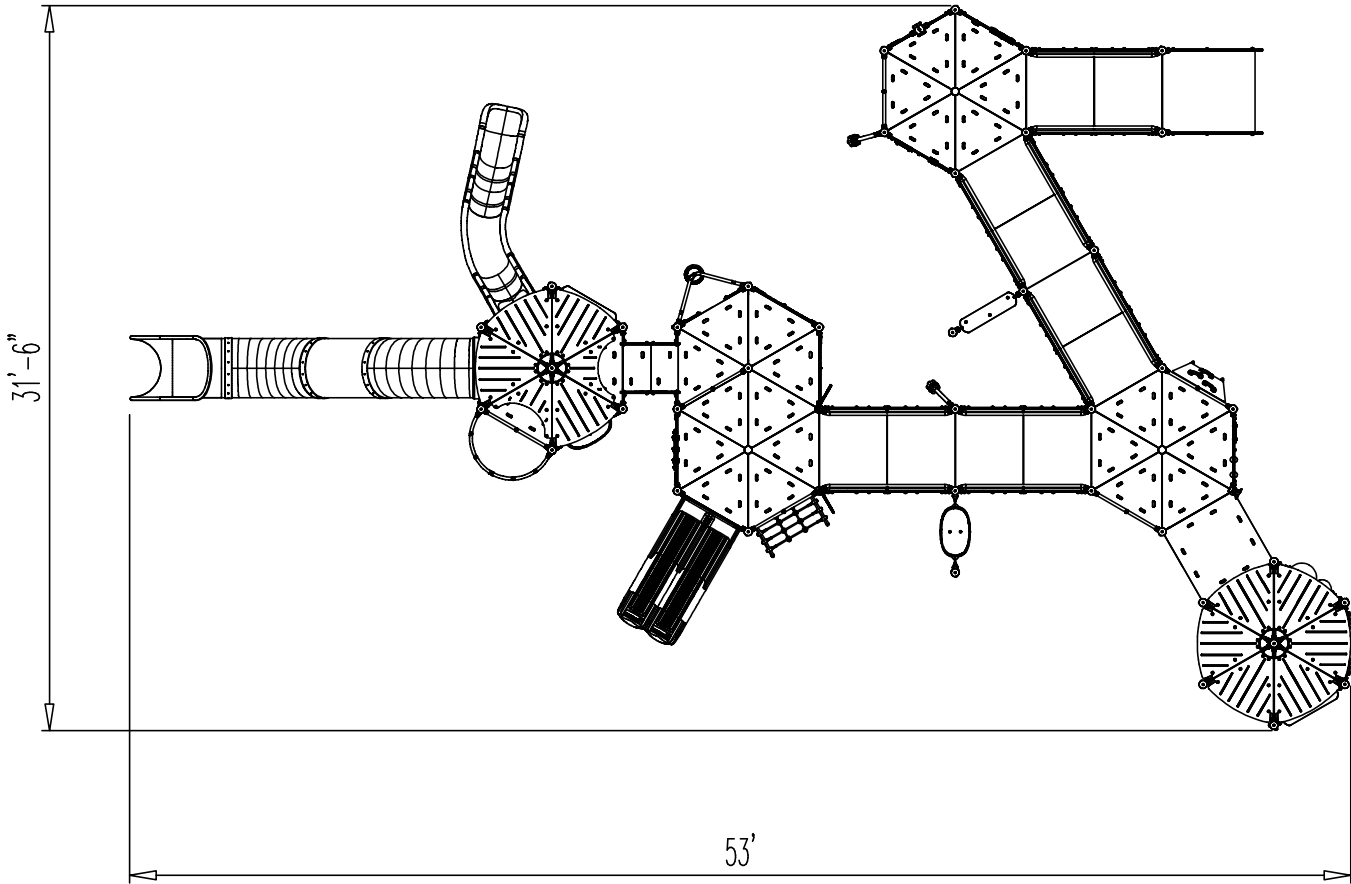


PCMS-CUSTOM
724474

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1:50



PCMS-CUSTOM STRUCTURE

PCM724474

ASTM F1487

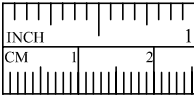
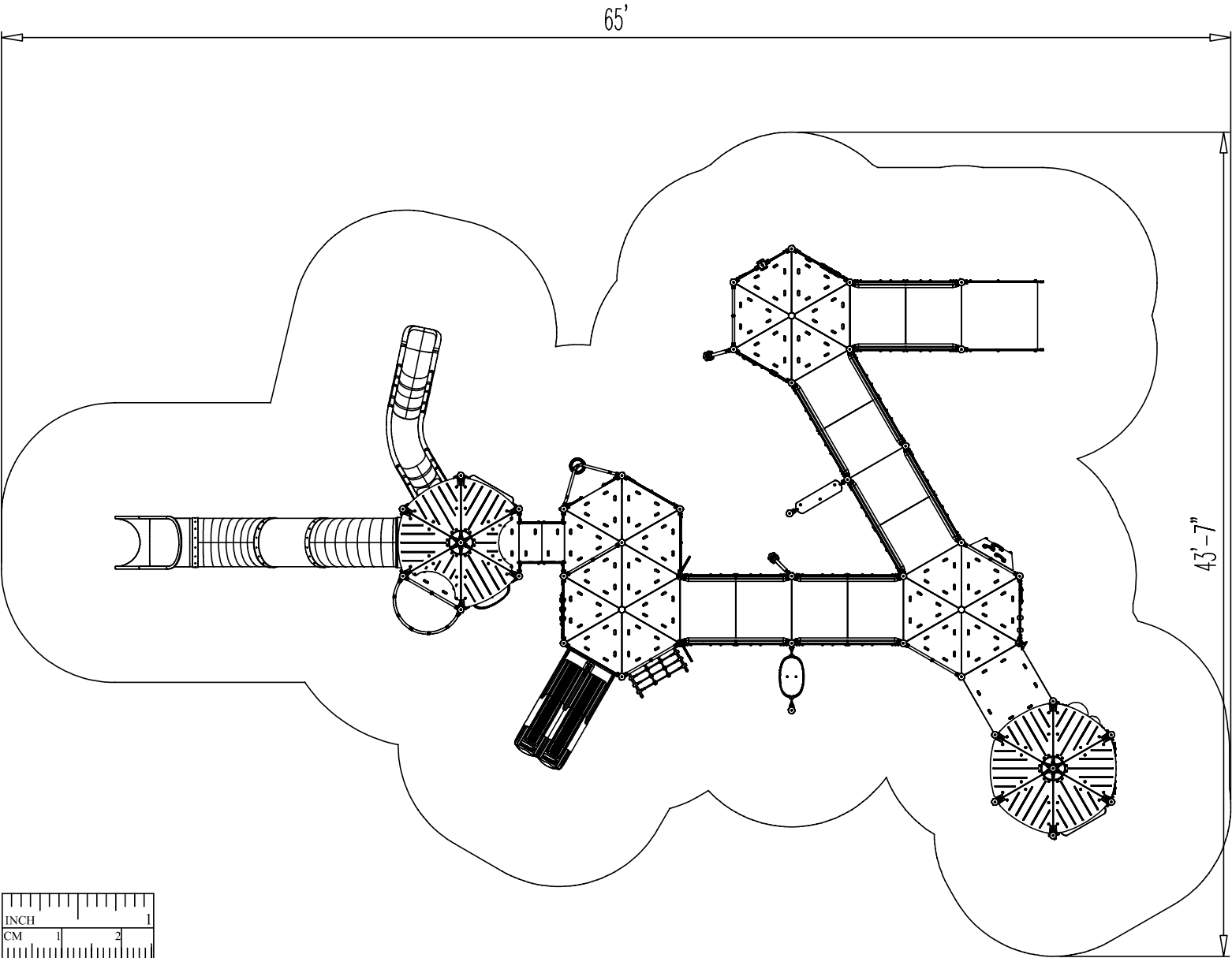


PCMS-CUSTOM
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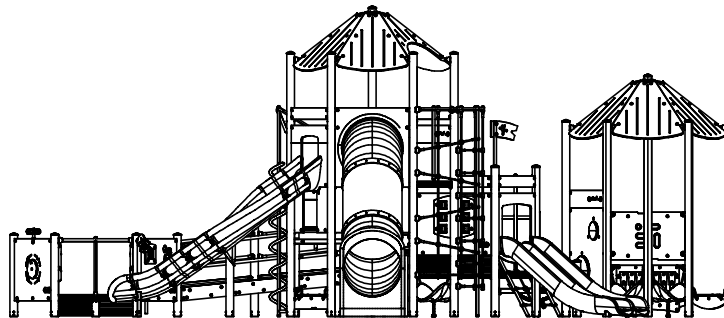
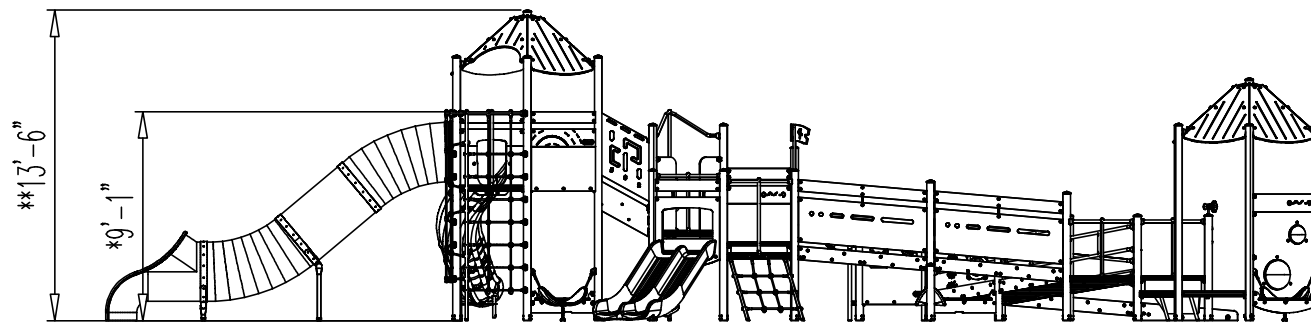
1':1/8"



PCMS-CUSTOM STRUCTURE

PCM724474

Highest designated play surface



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PCMS-CUSTOM

724474

20211122 ASC

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1:50

Swing Frame, 1 Seat

KSW921

Date

Signature



Item no. KSW921-20159868	
General Product Information	
Dimensions LxWxH	7'7"x6'0"x6'10"
Age group	2 - 12
Play capacity (users)	-
Color options	

KOMPAN Portal swings are a modern update on a traditional favorite, constructed from galvanized steel. They are configurable for the unique needs and requirements of every playground site. All Portal swings come standard in 7", 8" or 10" heights with posts made from hot dip galvanized steel. For swing seats, we offer as standard a rubber swing

seat, baby seat, or toddler swing seat for individual use, or the duo swing seat, birds nest, or you & me swing seat for multiple users. The seats are available with either hot dip galvanized chains or stainless steel chains with the option of antiwrap suspension. The modular swing system is also available in multibay configurations with 2, 3, 4 or more sections.



Swing Frame, 1 Seat

KSW921



Item no. KSW921-20159868

Installation Information

Max. fall height	Custom
Safety surfacing area	Custom
Number of installers	2
Total installation time	4.4
Excavation volume	Custom
Concrete volume	Custom
Footing depth (standard)	Custom
Shipment weight	Custom
Anchoring options	In-ground ✓

Warranty Information

Elevated activities 0	Accessible elevated activities	Accessible ground level activities	Accessible ground level play types
Present	0	0	0
Required	0	0	0

Swing Frame, 1 Seat

KSW921



Vertical posts of hot dip galvanized steel or powder coated on pre-galvanized steel base. Swing frame end connectors and crossbeam of hot dip galvanized steel or powder coated on hot dip galvanized steel base.

KOMPAN heavy duty designed swing hangers of stainless steel with anti-twist function. The hangers are attached to the cross beam on a welded bracket with two bolts, The bearings are embedded with silicone lubricant and needs no further lubrication.

KOMPAN designed the bird's nest seats to be light in weight and in compliance with global safety standards. The soft, shock absorbent bumpers with non-slip surface makes the swing seat extremely user friendly. Choose between a rope version with reinforced PA rope or a molded PE version. Both equipped with soft rubber bumpers.



The standard seats of KOMPAN swings is engineered for maximum safety and durability. The seat two component seat with a PP inner core and outside rubber is produced in one operation. The seats are available with swing chains of either hot dip galvanized steel or stainless steel for all swings heights.

The swing hangers are made of high quality UV-stabilized nylon (PA6) housing with integrated lifetime sealed ball bearings. The height adjustable chains are fixed by a stainless steel hook with theft proof snake-eye bolt in a turnable anti twist housing. All seats with two chain fixation are available with either standard or anti-wrap suspension.

Unique designed seats for toddlers: Baby seat of rubber. Toddler seat of PUR with four chain suspension for easy movement. Cradle seat. You & Me swing seat for adult/child or children of different ages to swing together while facing each other.

Item no. KSW921-20159868		
Installation Information		
Max. fall height	6'3"	
Safety surfacing area	Custom	
Number of installers	2	
Total installation time	Custom	
Excavation volume	Custom	
Concrete volume	Custom	
Footing depth (standard)	Custom	
Shipment weight	Custom	
Anchoring options	In-ground	✓
Warranty Information		
Steel post HDG	Lifetime	
Swing seat	10 years	
Swing hangers	5 years	
Chains	10 years	
Spare parts guaranteed	10 years	

Elevated activities	Accessible elevated activities	Accessible ground level activities	Accessible ground level play types
Present	0	1	1
Required	1	1	1

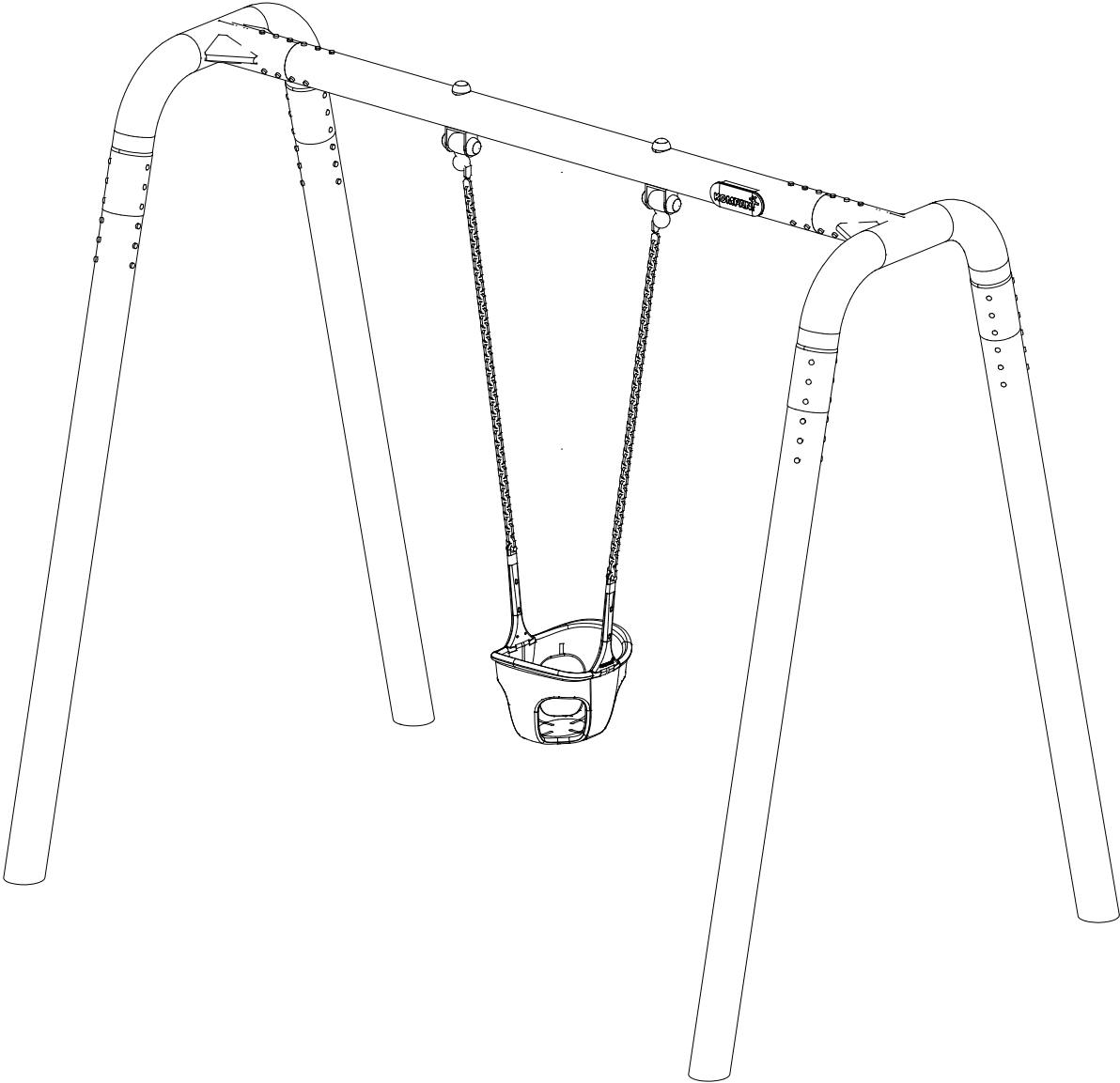
Swing Frame, 1 Seat

KSW921



KSW921
ID 20159868
MIRRIG
2022-04-01

Colorline:	Anthracite
Foundation:	90 cm
Norm:	ASTM
Units:	inch
Post Material:	Anthracite_Matt



Swing Frame, 1 Seat

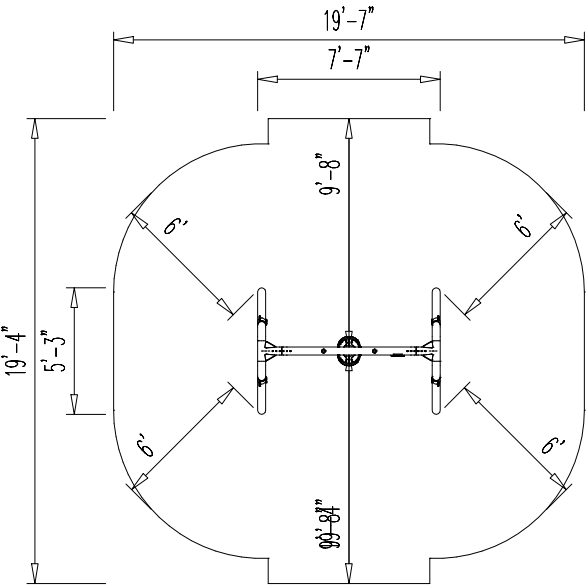
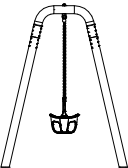
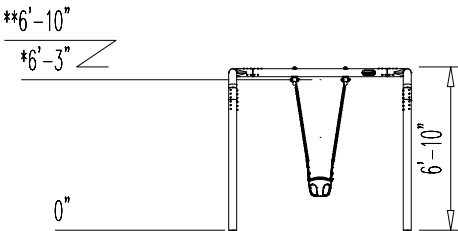
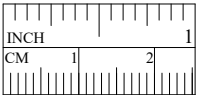
KSW921

ASTM



KSW921
ID 20159868
MIRRIG
2022-04-01

Scale: 1/8" = 1'-0"






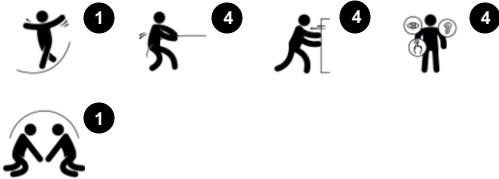
Universal Carousel

PCM157

Date _____ Signature _____



Item no. PCM157-0201	
General Product Information	
Dimensions LxWxH	6'10"x6'10"x2'4"
Age group	2 - 12
Play capacity (users)	8
Color options	  



WOW – this is play for everyone, no matter their abilities. The huge truly inclusive, universal design carousel attracts big groups of children and adults in for a spin. Due to its versatility, it appeals to children and adults again and again. The ground-level design makes the carousel accessible to everyone. The bench provides a comfortably seated spin. The handholds

function from both sides. From the inside they offer good support, while from the outside they get the carousel moving. Spinning on this carousel develops the vestibular system, sense of balance and spatial awareness. The benefits trained through play also include social skills, such as cooperation and empathy, by assisting friends of all abilities to spin and helping others

wanting to join or exit. It is play with a purpose for all.



Universal Carousel

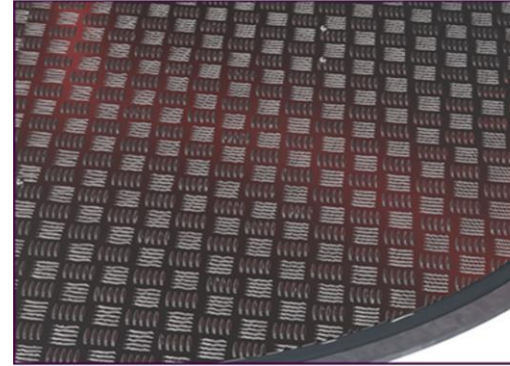
PCM157



Heavy duty designed welded carousel chassis of square steel pipes. The steel surfaces are hot dip galvanized inside and outside. The galvanization has excellent corrosion resistance in outside environments and is maintenance free.



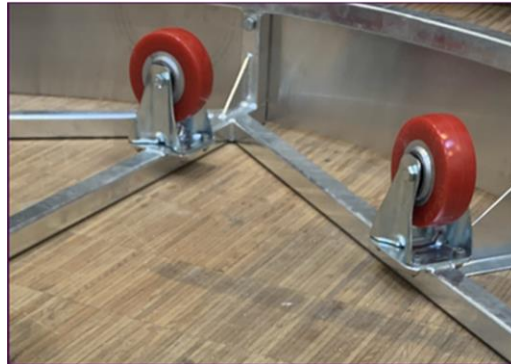
The metal parts are made of high quality steel, hot dip galvanized inside and outside with lead free zinc. On the outside, there is an additional layer of powder coating. This ensures both excellent corrosion resistance and colorful design expression.



Deck plate of 3mm thick non skid aluminum or 17,8mm thick HPL plate. For warm locations KOMPAN recommends HPL deck plate as the aluminum will get hot in sunny conditions. Both deck plate ensures safe play for all users and are maintenance free.



Seat is made of HPL with a thickness of 17.8mm with a very high wearing strength and a unique KOMPAN nonskid surface texture.



The roller system is designed with a fully closed lifetime lubricated center bearing supported by 10 wheels with a diameter of 125mm. The outer wheels ensures a smooth rotation under heavy load.



The outside hot dip galvanized steel ring makes a clear indication where the rotation deck begins.

Item no. PCM157-0201

Installation Information

Max. fall height	1'3"
Safety surfacing area	483 ft2
Number of installers	2
Total installation time	4.7
Excavation volume	3.03 yd3
Concrete volume	0.81 yd3
Footing depth (standard)	1'3"
Shipment weight	830 lbs
Anchoring options	In-ground ✓

Warranty Information

Hot dip galvanized steel	Lifetime
Aluminum deck	15 years
HPL seat	15 years
Bearing construction	5 years
Spare parts guaranteed	10 years

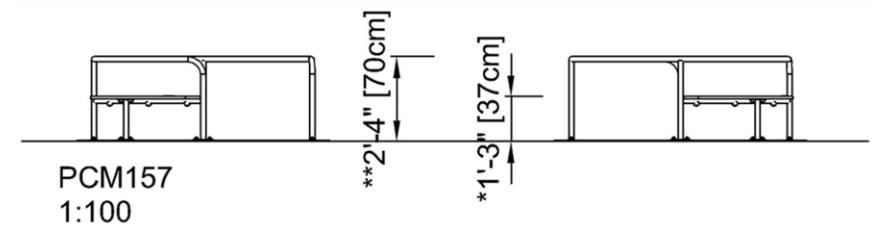
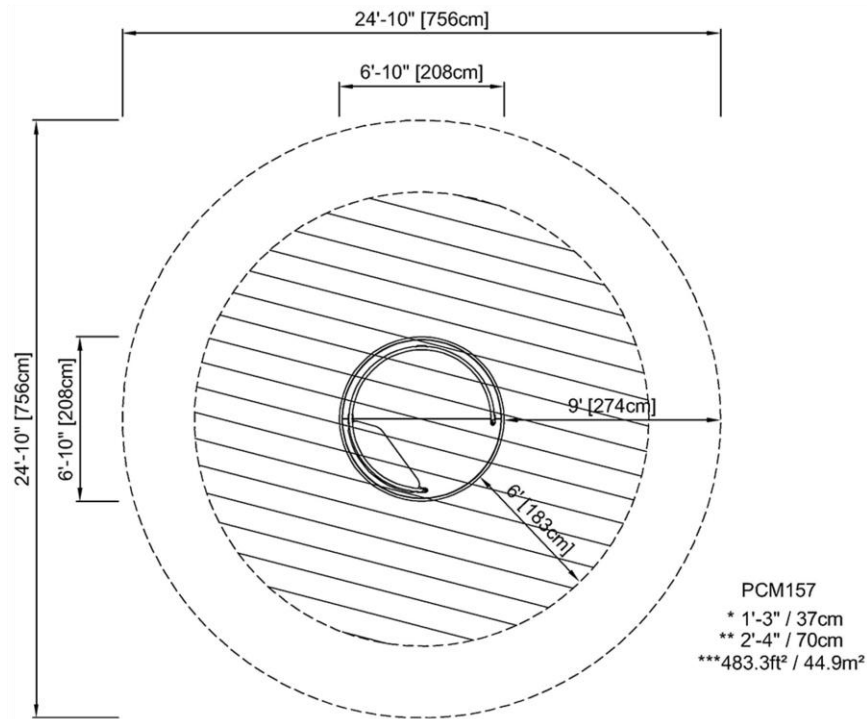
Elevated activities 0	Accessible elevated activities	Accessible ground level activities	Accessible ground level play types
Present	0	1	1
Required	0	1	1

Universal Carousel

PCM157

* Max fall height | ** Total height | *** Safety surfacing area

* Max fall height | ** Total height



[Click to see 1:100 ratio TOP VIEW](#)

[Click to see 1:100 ratio SIDE VIEW](#)

Large Play Tower with curved Slide

PCM103731

Date

Signature

Item no. PCM103731-0901

General Product Information

Dimensions LxWxH	16'0"x10'11"x8'3"
Age group	2 - 5
Play capacity (users)	21
Color options	



This activity-packed play unit will appeal to children with its varied play activities. It will attract children again and again. The ladder forms fast access for all to the slide. The climbing wall is a challenging entrypoint that requires several attempts for the less trained climber, but the reward when they complete is wonderful! The climbing wall stimulates cross-

coordination, which has a positive impact on e.g. children's reading skills. Sliding supports balance and posture, both important for managing the world securely. At ground level, responsive play panels form a creative place to socialize. The clock panel invites dramatic play. The music panel stimulates the child's creativity and encourages turn-taking skills while letting

the child explore sound and tonality. All in all, playful space for making friends.



Large Play Tower with curved Slide

PCM103731



Panels of 19mm EcoCore™. EcoCore™ is a highly durable, eco friendly material, which is not only recyclable after use, but also consists of a core produced from 100% recycled material.



Main posts with hot-dip galvanized steel footing are available in different materials: Pressure impregnated pinewood posts. Pre-galvanized inside and outside with powder-coated top finish steel posts. Lead-free aluminum with color anodized top finish. Greenline TexMade posts of 100% post-consumer recycled PE and textile waste.



All decks are supported by uniquely designed low-carbon aluminum profiles with multiple attachment options. The grey-colored molded decks are made of 75% post-consumer ocean waste PP material with a non-skid pattern and texture surface.



The slides can be chosen in different materials and colors: Straight or curved one-piece molded PE slides in yellow or grey. Combined EcoCore™ sides and stainless steel. Full stainless steel in one-piece designs for more vandalism-proof solutions.



KOMPAN GreenLine versions are constructed with the most environmentally friendly materials with the lowest possible CO2e emission factor. TexMade posts, EcoCore™ panels of 100% post-consumer recycled ocean waste, and molded PP decks.

Item no. PCM103731-0901	
Installation Information	
Max. fall height	3'10"
Safety surfacing area	453 ft2
Number of installers	2
Total installation time	22.2
Excavation volume	0.64 yd3
Concrete volume	0.00 yd3
Footing depth (standard)	2'9"
Shipment weight	1,093 lbs
Anchoring options	
Warranty Information	
EcoCore HDPE	Lifetime
Post	10 years
PP Decks	10 years
Spare parts guaranteed	10 years

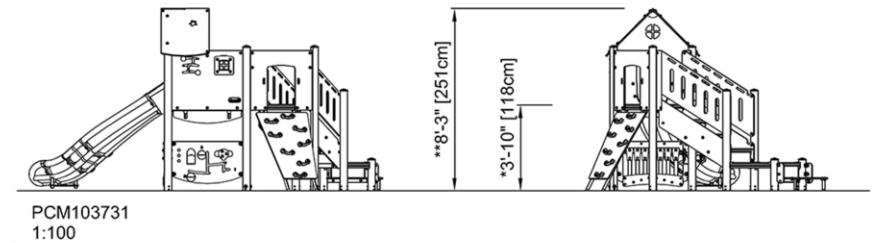
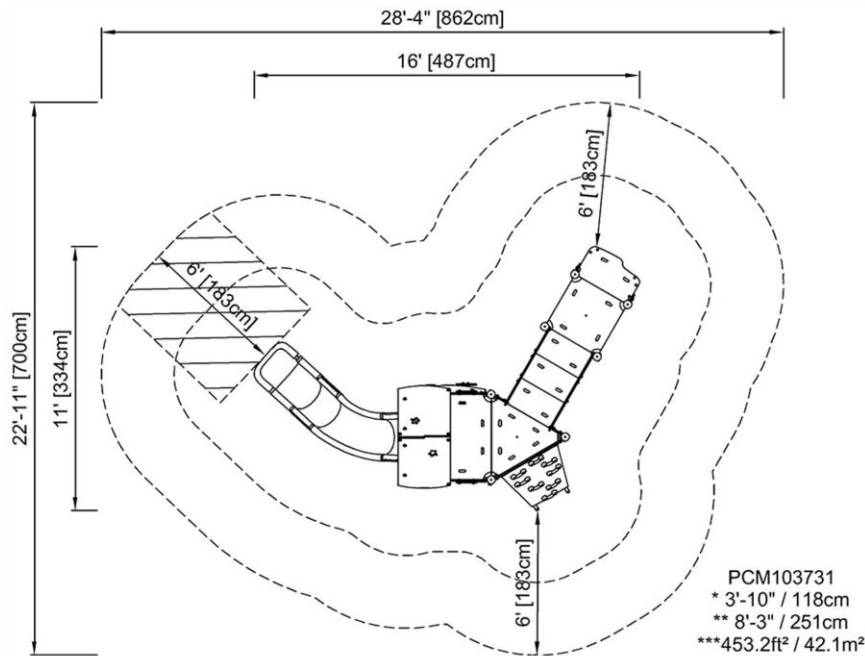
Elevated activities 3	Accessible elevated activities	Accessible ground level activities	Accessible ground level play types
Present	3	1	1
Required	2	1	1

Large Play Tower with curved Slide

PCM103731

* Max fall height | ** Total height | *** Safety surfacing area

* Max fall height | ** Total height



[Click to see 1:100 ratio TOP VIEW](#)

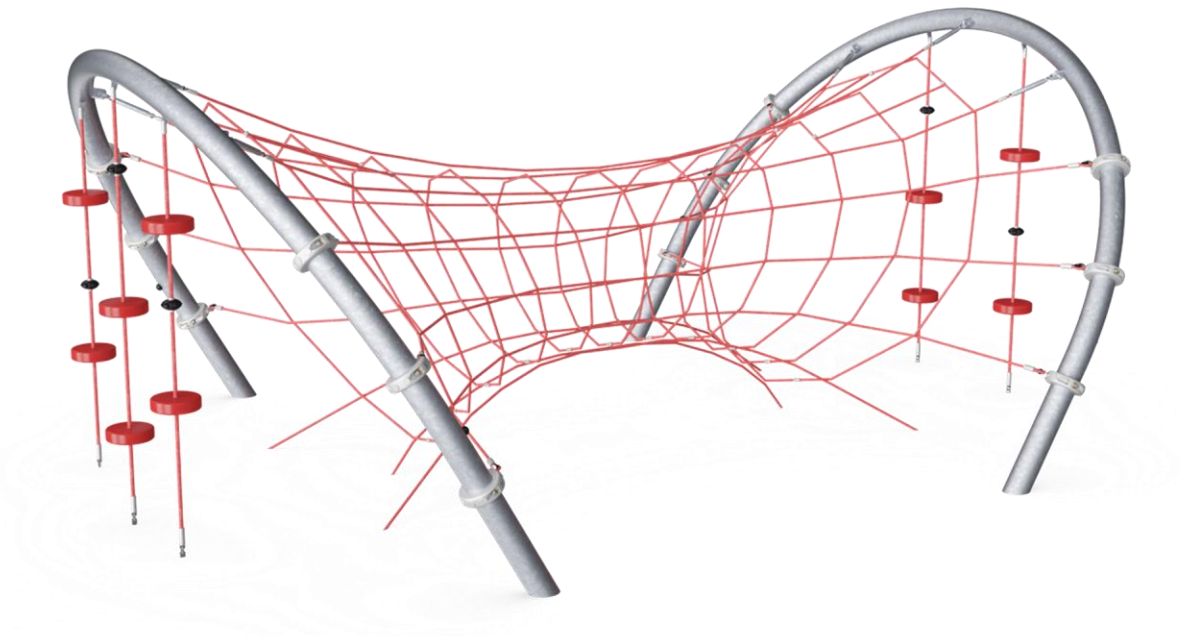
[Click to see 1:100 ratio SIDE VIEW](#)

Arc Tunnel

COR20600




Date

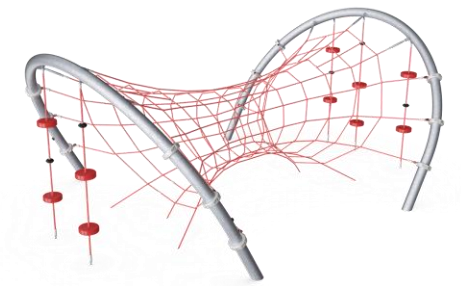
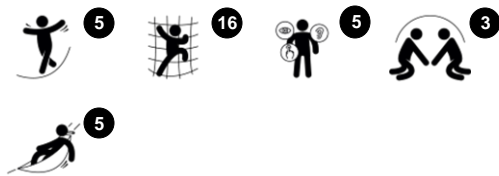
Signature



Item no. COR206001-1101

General Product Information

Dimensions LxWxH	19'4"x13'9"x8'2"
Age group	5 - 12
Play capacity (users)	17
Color options	  



The Arc Tunnel is a three dimensional wobbly climbing structure with remarkable, rounded steel posts to carry the net. The Arc Tunnel offers hours of play for numerous children and adults alike with its vertical as well as horizontal climbing. The structure is a great place for sitting, standing or lying which allows everyone to play together. The play ropes with rubber

seats allow for groups socializing while gently swaying on the ropes. The spacious surface allows for many users. And the transparency makes socializing throughout the net possible. While climbing up, around and through the Arc Tunnel, children's physical skills are supported: their balance, muscle strength and cross coordination are trained. These are all skills

important for sitting still, concentrating, or for navigating spaces with obstacles safely.



Arc Tunnel

COR20600



Corocord 16mm ropes are special 'Hercules'-type with galvanized four-stranded steel wires and a steel wire core. Each strand is tightly wrapped with PES yarn, which is melted onto each individual strand. The ropes are highly wear-and-vandalism-resistant and can be replaced at site if needed.



Corocord 'S' clamps are used as universal connections in Corocord products. 8mm stainless steel rods with rounded edges are pressed around the ropes with a special hydraulic press, making them the ideal connector: safe, durable and vandalism-proof, all while allowing the typical movement of rope play structures.



Fully colored EPDM rubber discs with smooth surface. The moulded EPDM surrounds a hot dip galvanized steel core that ensures both the stability of the discs and durable fixation to the rope.



Corocord aluminium clamps are used as connectors between steel posts and rope. Two aluminium castings are bolted together. The height of the clamps is thus variable.



The steel arches are hot dip galvanized inside and outside with lead free zinc. The galvanization has excellent corrosion resistance in outside environments and requires low maintenance.

Item no. COR206001-1101	
Installation Information	
Max. fall height	8'2"
Safety surfacing area	688 ft ²
Number of installers	2
Total installation time	33.1
Excavation volume	8.80 yd ³
Concrete volume	6.16 yd ³
Footing depth (standard)	3'7"
Shipment weight	1,652 lbs
Anchoring options	In-ground ✓
Warranty Information	
Corocord Rope	10 years
S-Clamps	10 years
Aluminum clamps	10 years
EPDM components	2 years
Spare parts guaranteed	10 years

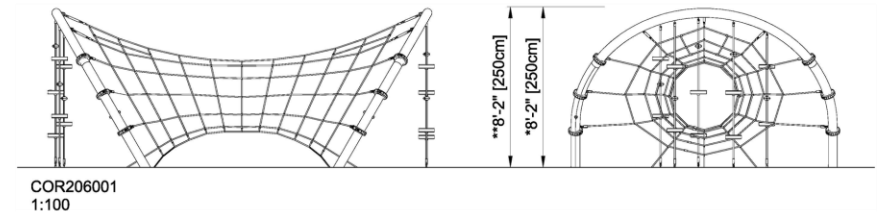
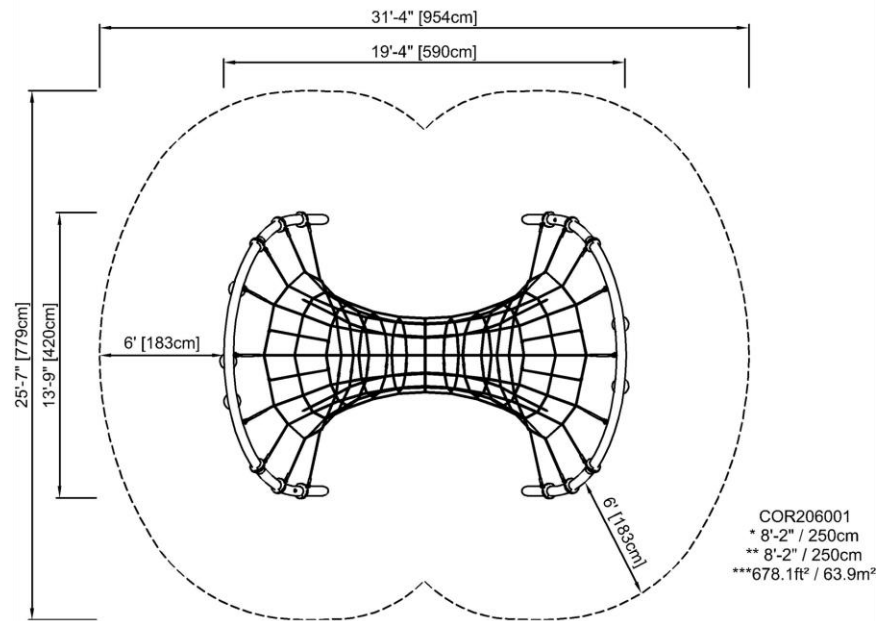
Elevated activities 0	Accessible elevated activities	Accessible ground level activities	Accessible ground level play types
Present	0	1	1
Required	0	1	1

Arc Tunnel

COR20600

* Max fall height | ** Total height | *** Safety surfacing area

* Max fall height | ** Total height



[Click to see 1:100 ratio TOP VIEW](#)

[Click to see 1:100 ratio SIDE VIEW](#)

Swing Frame, 8 Seat

KSW928

Date

Signature

Item no. KSW928-20159876

General Product Information

Dimensions LxWxH	45'11"x6'0"x8'5"
Age group	2 - 12
Play capacity (users)	-
Color options	



KOMPAN Portal swings are a modern update on a traditional favorite, constructed from galvanized steel. They are configurable for the unique needs and requirements of every playground site. All Portal swings come standard in 7", 8" or 10" heights with posts made from hot dip galvanized steel. For swing seats, we offer as standard a rubber swing

seat, baby seat, or toddler swing seat for individual use, or the duo swing seat, birds nest, or you & me swing seat for multiple users. The seats are available with either hot dip galvanized chains or stainless steel chains with the option of antiwrap suspension. The modular swing system is also available in multibay configurations with 2, 3, 4 or more sections.



Swing, 8 ft H

KSW928



Vertical posts of hot dip galvanized steel or powder coated on pre-galvanized steel base. Swing frame end connectors and crossbeam of hot dip galvanized steel or powder coated on hot dip galvanized steel base.



KOMPAN heavy duty designed swing hangers of stainless steel with anti-twist function. The hangers are attached to the cross beam on a welded bracket with two bolts. The bearings are embedded with silicone lubricant and needs no further lubrication.



KOMPAN designed the bird's nest seats to be light in weight and in compliance with global safety standards. The soft, shock absorbent bumpers with non-slip surface makes the swing seat extremely user friendly. Choose between a rope version with reinforced PA rope or a molded PE version. Both equipped with soft rubber bumpers.



The standard seats of KOMPAN swings is engineered for maximum safety and durability. The seat two component seat with a PP inner core and outside rubber is produced in one operation. The seats are available with swing chains of either hot dip galvanized steel or stainless steel for all swings heights.



The swing hangers are made of high quality UV-stabilized nylon (PA6) housing with integrated lifetime sealed ball bearings. The height adjustable chains are fixed by a stainless steel hook with theft proof snake-eye bolt in a turnable anti twist housing. All seats with two chain fixation are available with either standard or anti-wrap suspension.



Unique designed seats for toddlers: Baby seat of rubber. Toddler seat of PUR with four chain suspension for easy movement. Cradle seat. You & Me swing seat for adult/child or children of different ages to swing together while facing each other.

Item no. Item no. KSW928-20159876

Installation Information

Max. fall height	7'11"
Safety surfacing area	Custom
Number of installers	2
Total installation time	4.9
Excavation volume	Custom
Concrete volume	Custom
Footing depth (standard)	Custom
Shipment weight	Custom
Anchoring options	In-ground ✓

Warranty Information

Steel post HDG	Lifetime
Swing seat	10 years
Swing hangers	5 years
Chains	10 years
Spare parts guaranteed	10 years

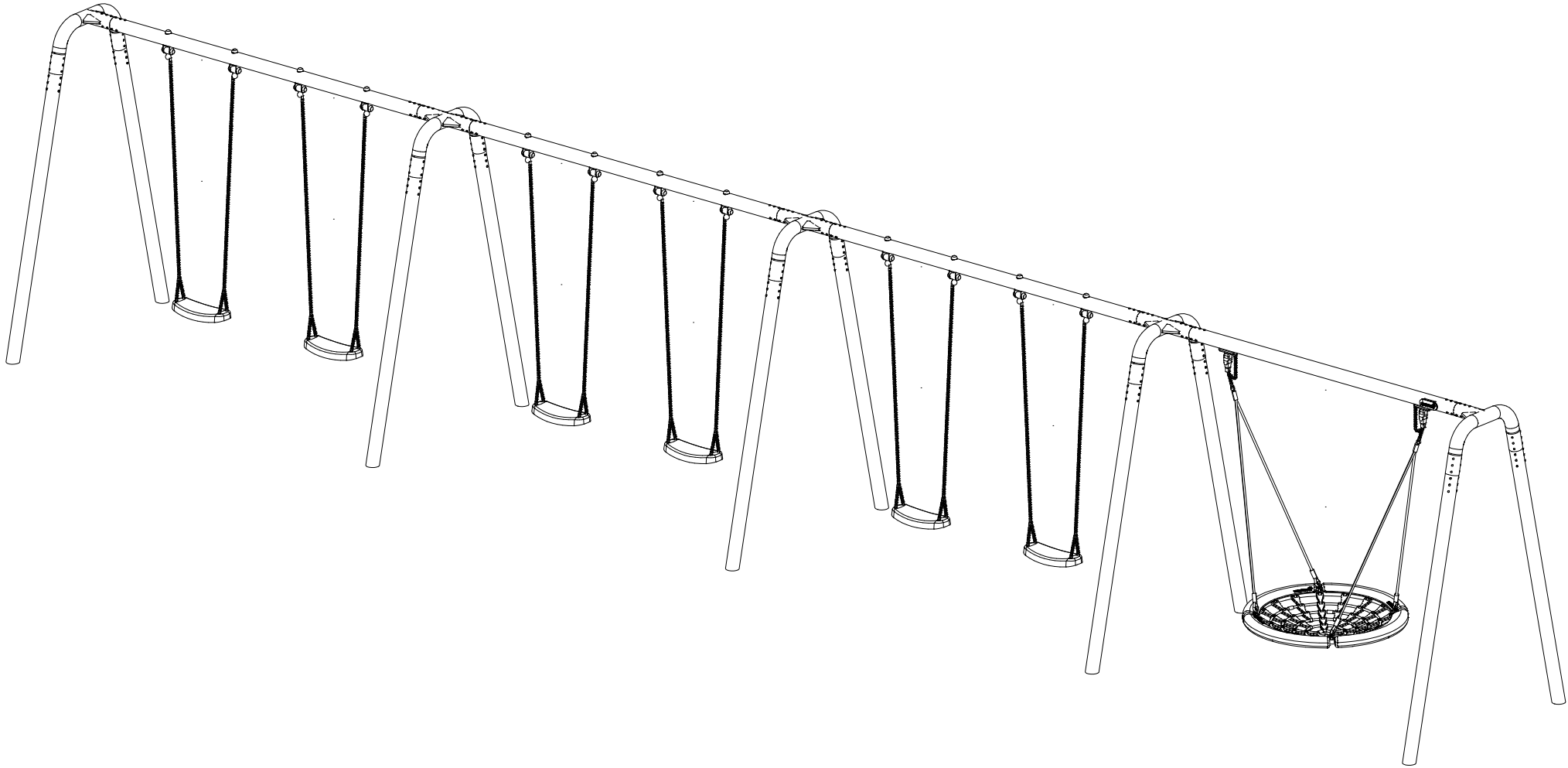
Elevated activities	Accessible elevated activities	Accessible ground level activities	Accessible ground level play types
Present	0	1	1
Required	1	1	1

Swing, 8 ft H
KSW928



KSW928
ID 20159876
MIRRIG
2022-04-01

Colorline:	Anthracite
Foundation:	90 cm
Norm:	ASTM
Units:	inch
Post Material:	Anthracite_Matt



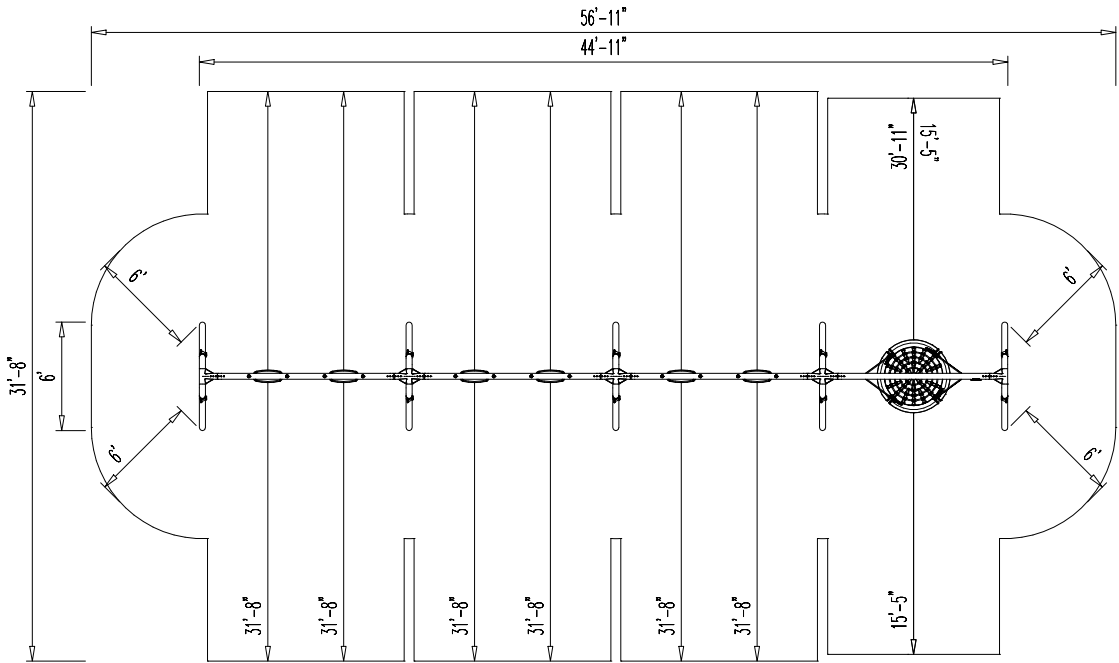
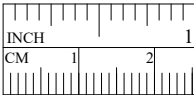
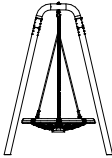
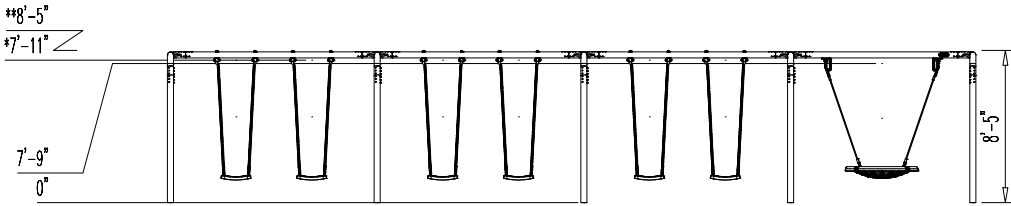
Swing, 8 ft H
KSW928

ASTM



KSW928
ID 20159876
MIRRIG
2022-04-01

Scale: 3/32" = 1'-0"



Chelsea Overhead Ladder

PCX802-760042

Date _____ Signature _____



Item no. PCX802-760042	
General Product Information	
Dimensions LxWxH	Custom
Age group	5 - 12
Play capacity (users)	Custom
Color options	

The CHELSEA Inclined Overhead Ladder, also known as monkey bars, is a favorite activity among children. They keep trying to manage the "walking", hand over hand, from one end to another, which ensures holding power. Besides being great fun the inclined overhead ladder is perfect for developing physical skills, such as overall body control, cross-body coordination,

proprioception and upper body strength. It supports training of many different muscle groups including arms, shoulders and abdominals. To do the "walking" by swinging from one bar to the next is challenging and requires a lot of courage. Trying again and again develops children's overall body control and self regulation, important for their emotional

development, such as their self esteem."



Chelsea Overhead Ladder

PCX802-760042



All steel components are made of high quality materials. The posts have an alloy with improved tensile and yield strength according to the NYCP material specification. The painted aluminum post caps are riveted to the top of the post.



The steel surfaces are hot-dip galvanized inside and outside with lead-free zinc. The galvanization has excellent corrosion resistance in outside environments and requires minimal maintenance.

Item no. PCX802-760042		
Installation Information		
Max. fall height	6'1"	
Safety surfacing area	Custom	
Number of installers	2	
Total installation time	Custom	
Excavation volume	Custom	
Concrete volume	Custom	
Footing depth (standard)	Custom	
Shipment weight	Custom	
Anchoring options	In-ground	✓
Warranty Information		
EcoCore HDPE	Lifetime	
HDG post	Lifetime	
HPL decks	15 years	
Ropes & nets	10 years	
Spare parts guaranteed	10 years	

Elevated activities	Accessible elevated activities	Accessible ground level activities	Accessible ground level play types
Present	0	1	1
Required	0	1	1

Chelsea Overhead Ladder

PCX802-760042

Binding approval for Variant Design

When pressing "Prepare to order" in CRM all purchases are subject to this design. This design is defined under its own KOMPAN identification number, which is stated in upper right corner. All constructional details, dimensions, materials, colours and specifications shown on attached datasheets (plan, side, perspective view + safety zone) are hereby accepted when placing the order. Changes are no longer possible.

Notwithstanding the aforementioned and without changing the overall design, Variant Team may in the construction phase, without obtaining approval, perform smaller modifications when deemed beneficial or necessary for the construction. All other modifications are subject to prior approval.

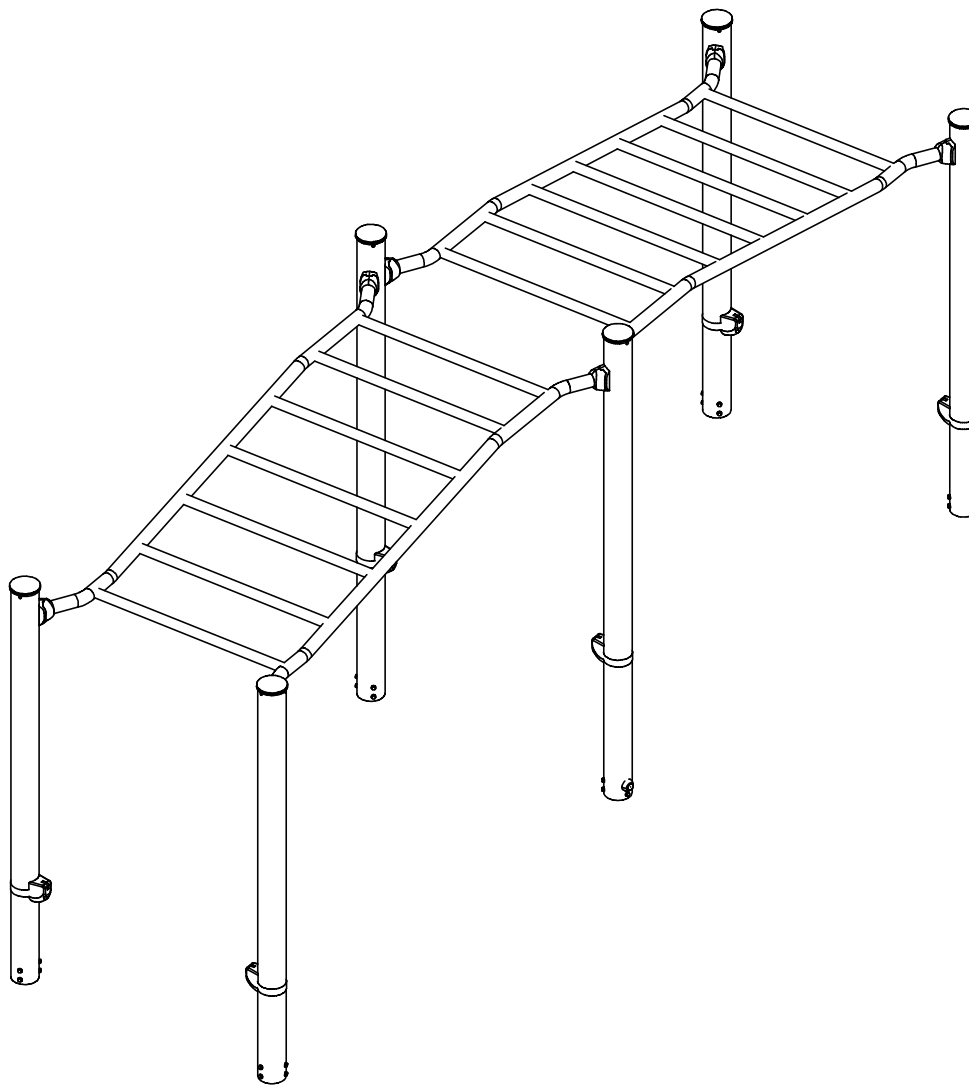
KOMPAN!

PCX-CUSTOM

760042

20220408 ASC

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Chelsea Overhead Ladder

PCX802-760042

ASTM F1487



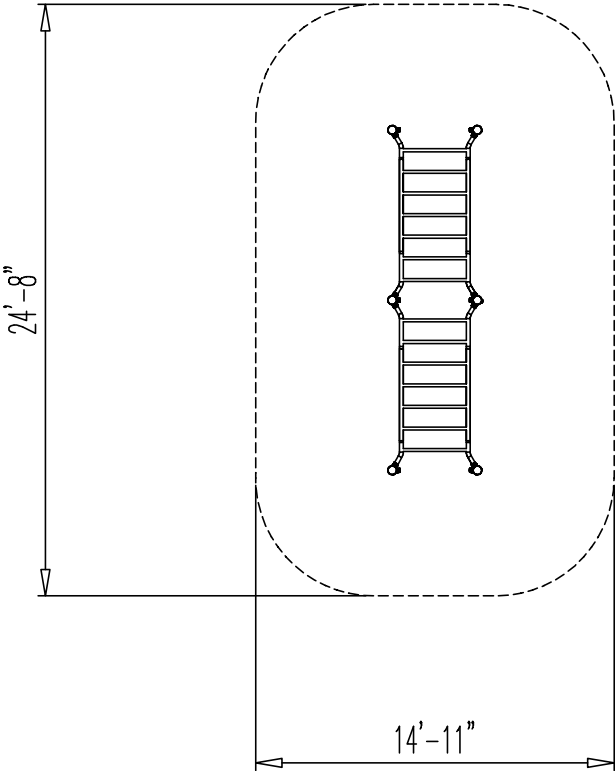
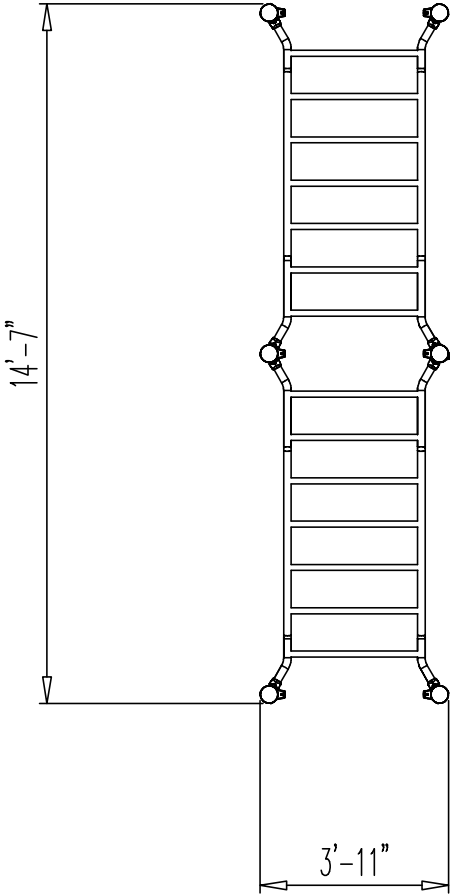
PCX-CUSTOM

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1':1/4"



Chelsea Overhead Ladder

PCX802-760042

Highest designated play surface

KOMPAN!

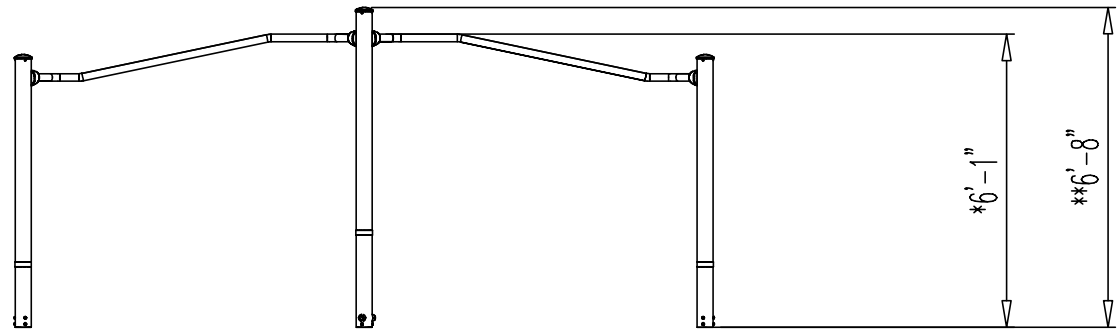
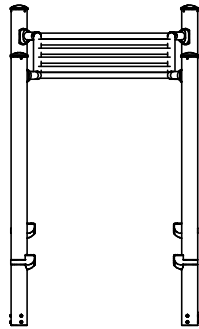
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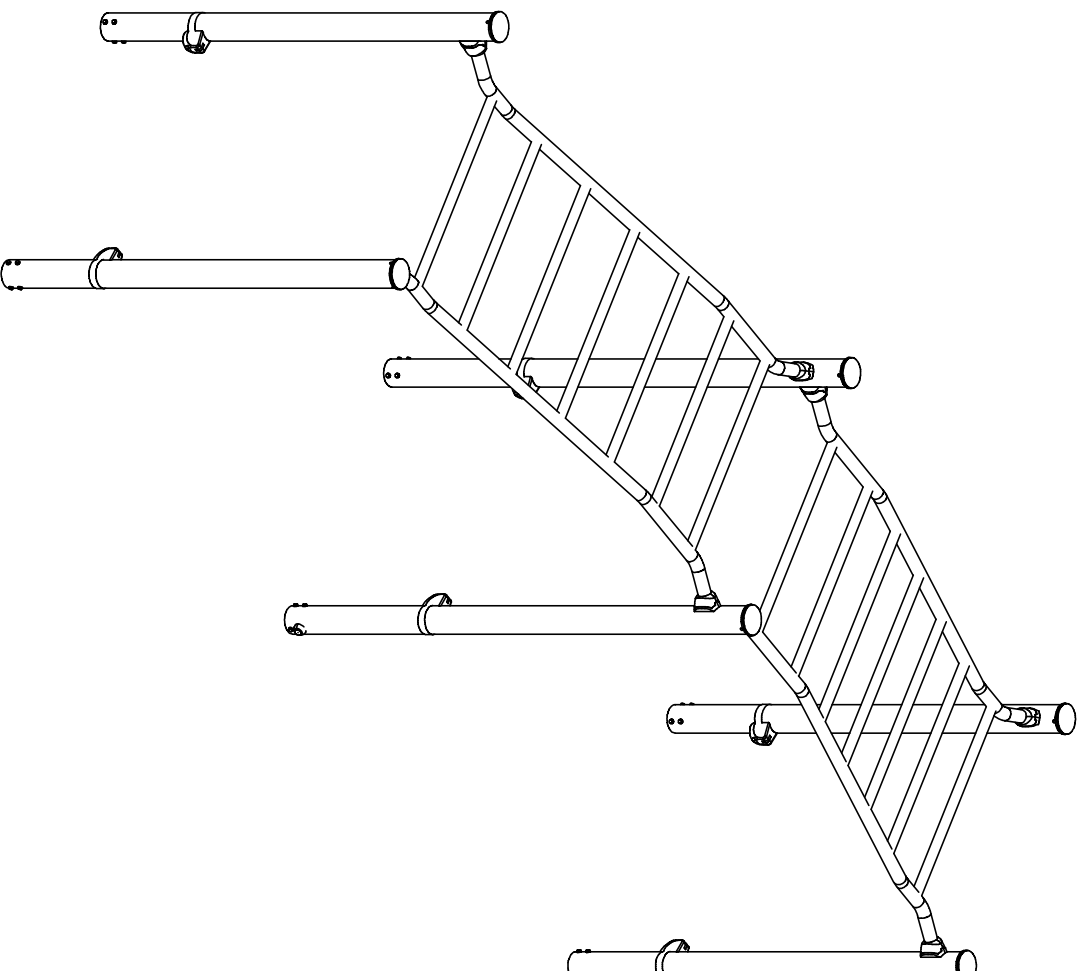
1':1/4"



Binding approval for Variant Design

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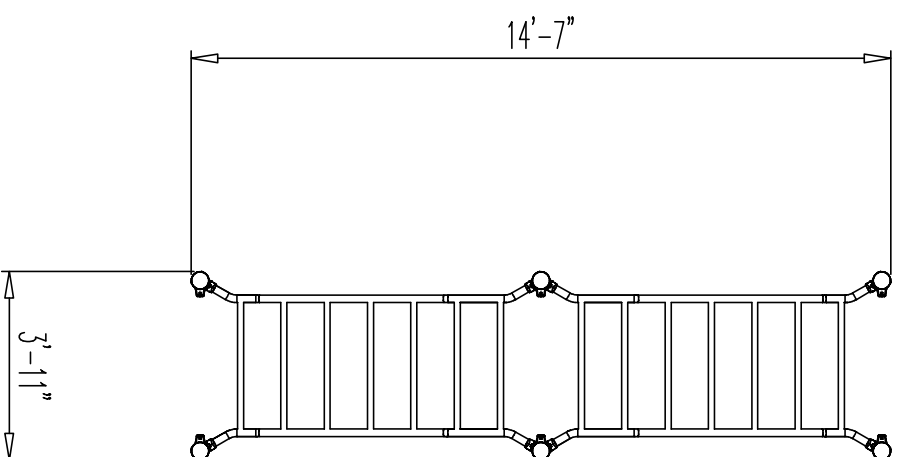
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1:1/4"



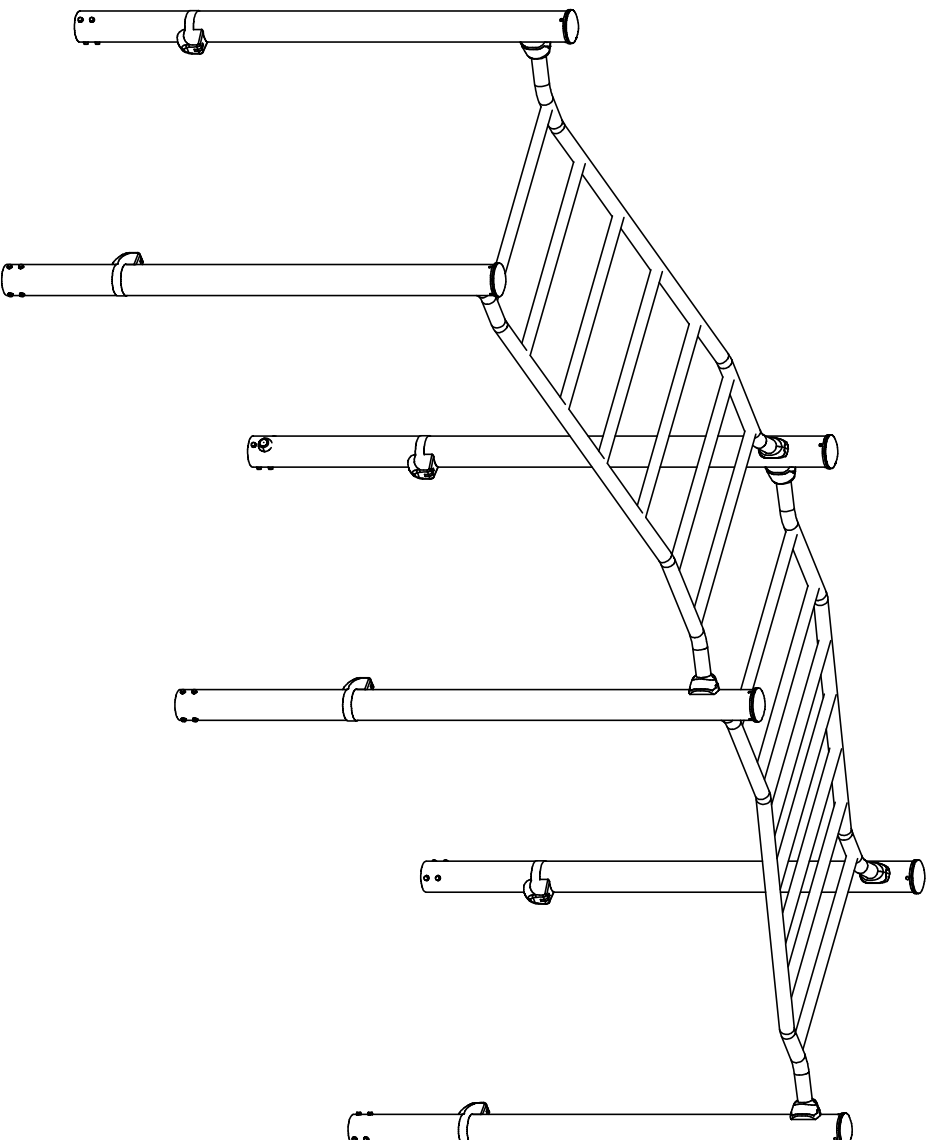


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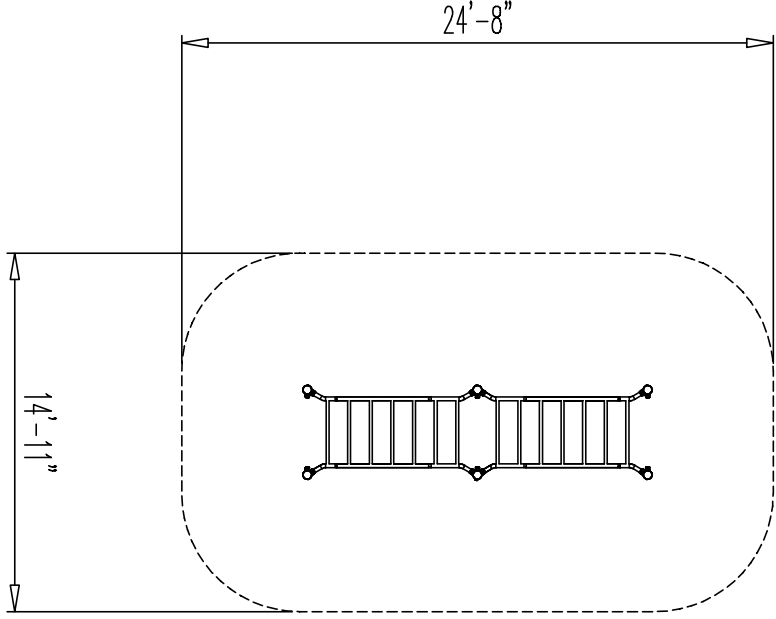
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ASTM F1487



KOMPAN

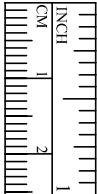
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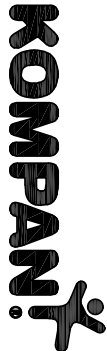
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1:1/8"



Highest designated play surface



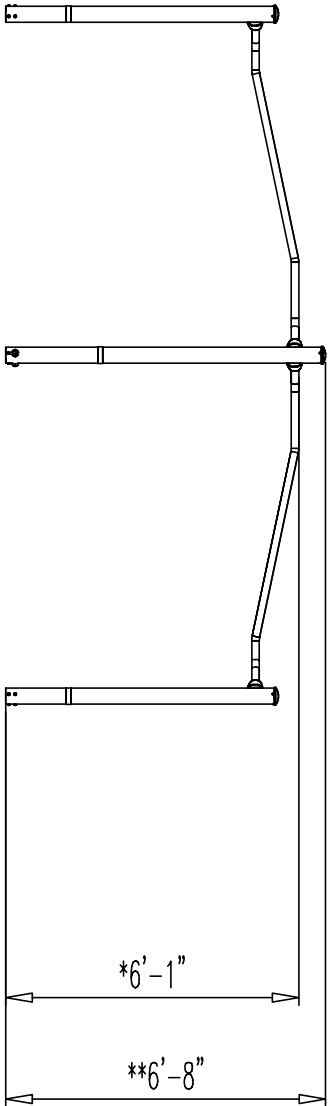
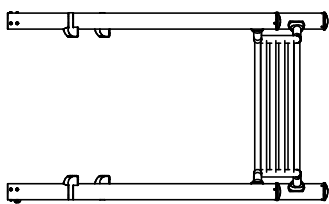
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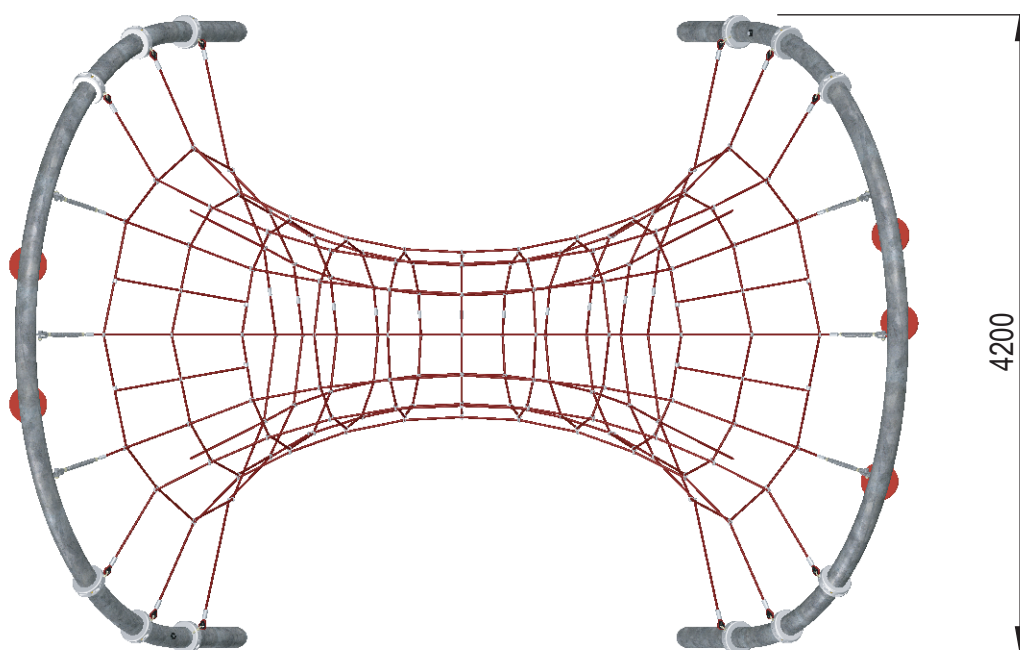
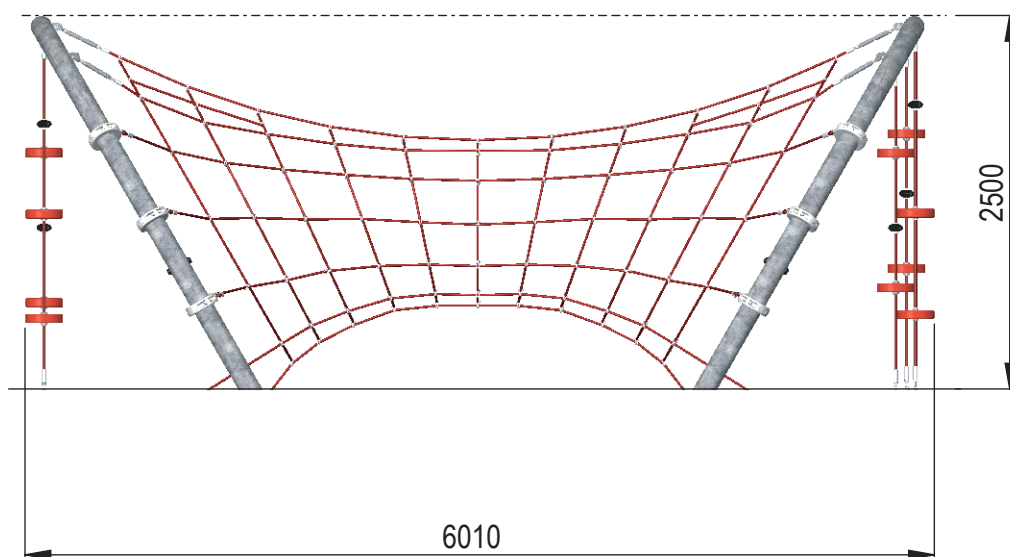
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1:1/4"



Plan and View



O:\2000E_Entdeckerwelten\2060\04-02_techn. Zeichnungen_Intern\2060 Arc Tunnel.dwg
 Conceptual custom design - actual components may vary actual sag could be larger than displayed

scale 1:50

Foundation plan Section drawing

Foundations:

2 A arch foundations see reinforcement drawing

340 x 80 x 65 cm

5 anchor blocks

2 x B1 ; 3 x B2

50 x 50 x 50 cm

1 anchor blocks

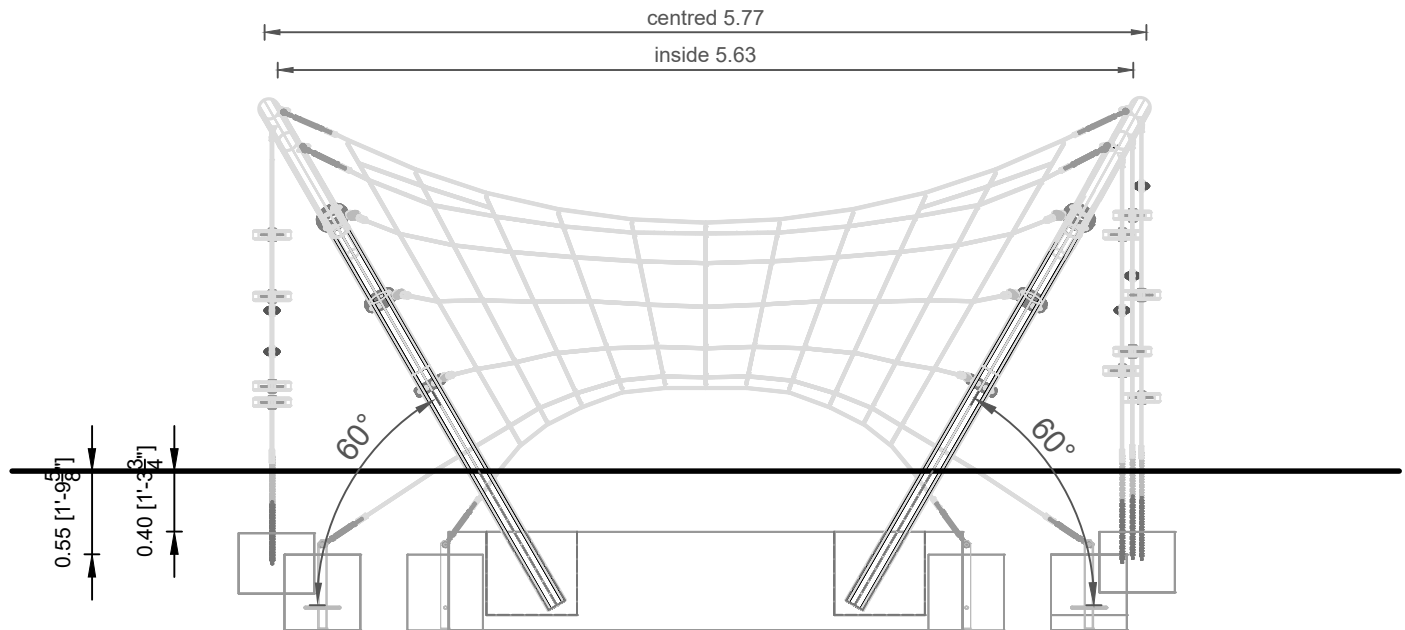
1 x B3

60 x 50 x 50 cm

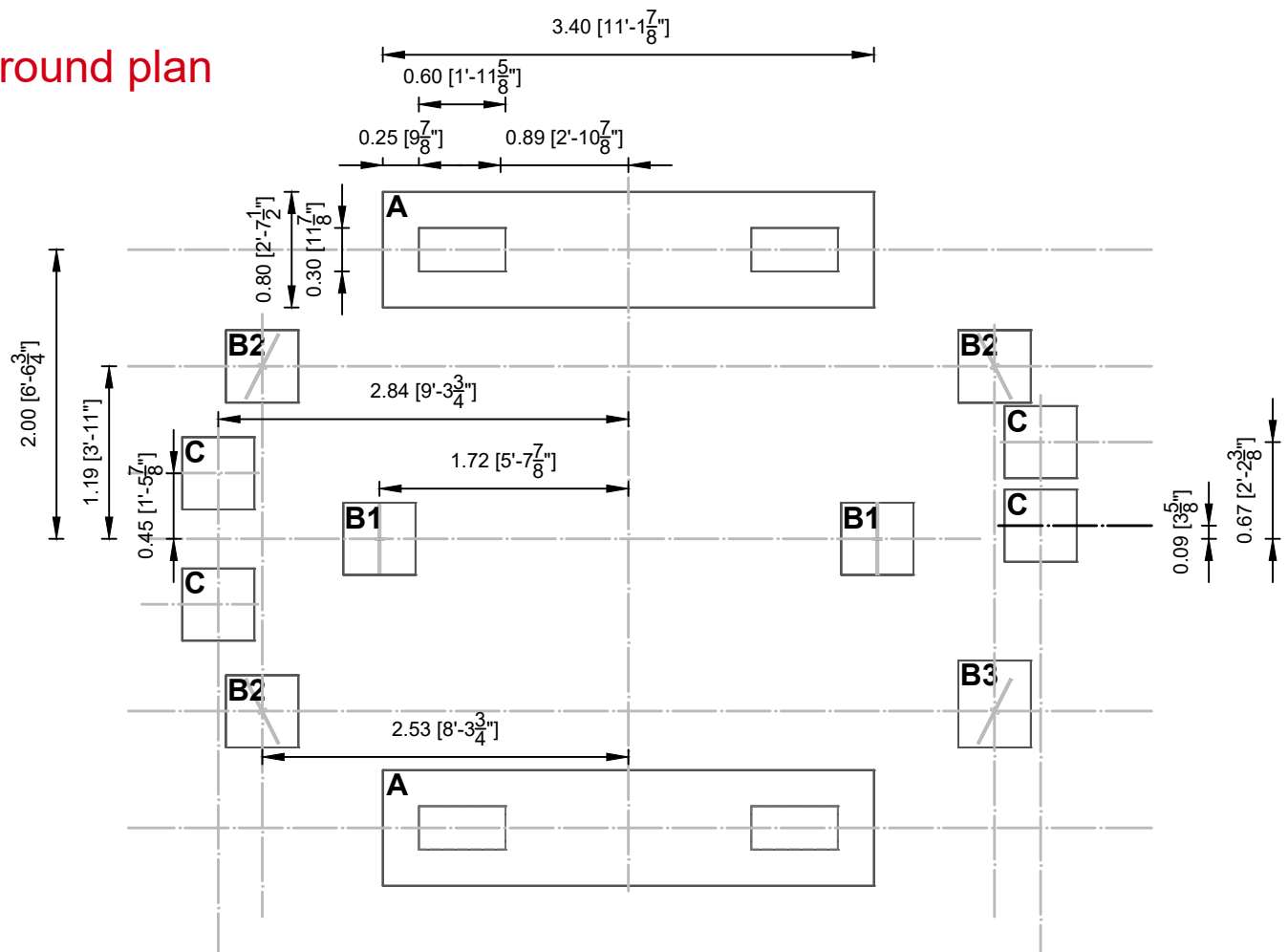
4 Heavy duty anchor blocks

4 x C

50 x 50 x 40 cm



Ground plan



T:_ORIGINALZEICHNUNGEN\2000_Spiel- & Kletternetze\2060\2060 Arc Tunnel_rev3.dwg

Conceptual custom design - actual components may vary actual sag could be larger than displayed

scale 1:50

Foundation plan details

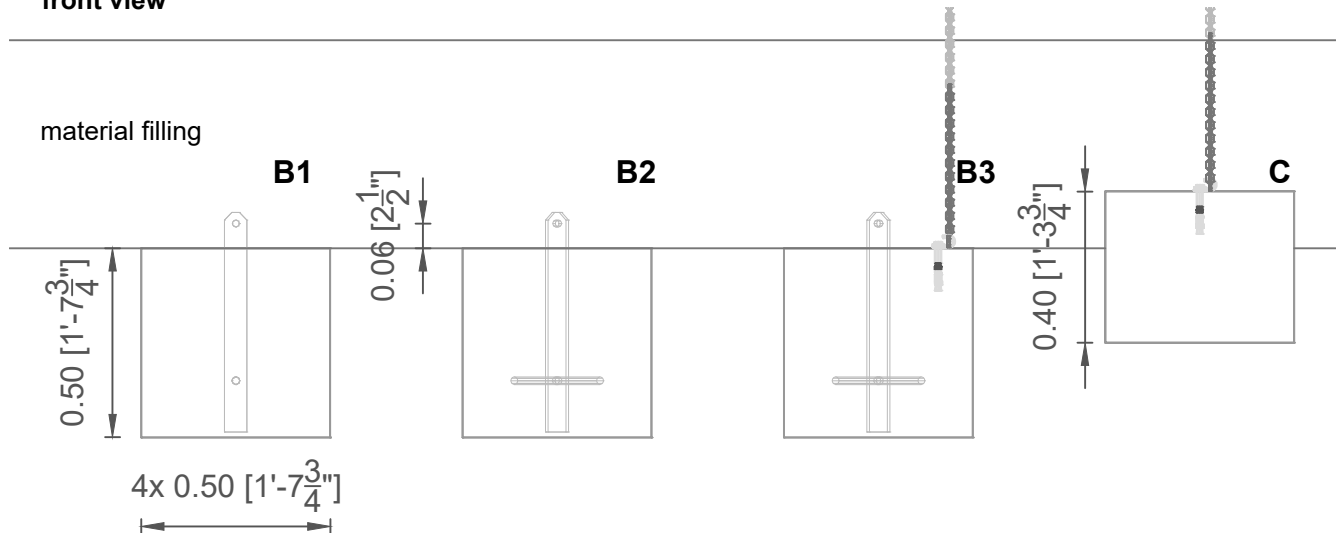
Foundations:

5 anchor blocks
2 x B1 ; 3 x B2
50 x 50 x 50 cm

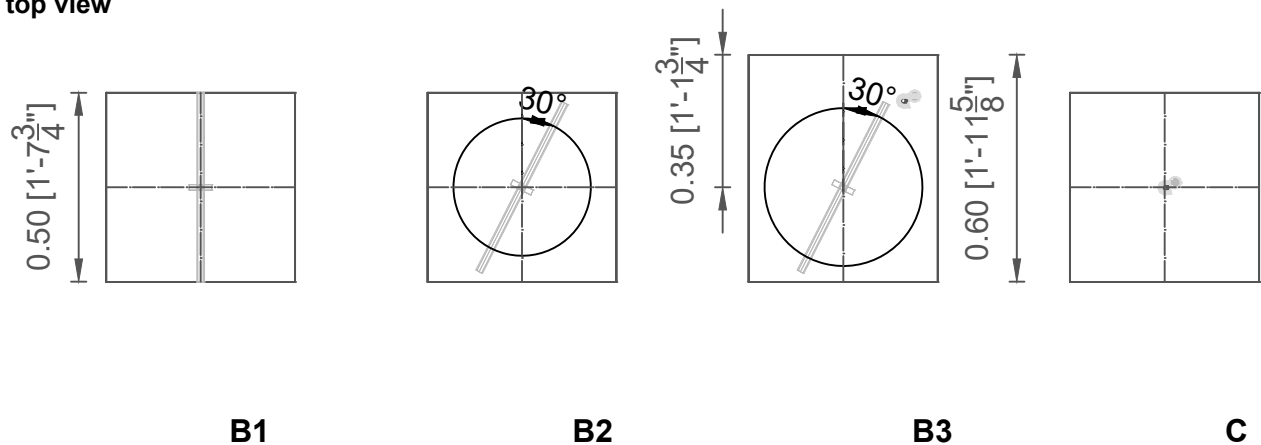
1 anchor blocks
1 x B3
60 x 50 x 50 cm

4 Heavy duty anchor blocks
4 x C
50 x 50 x 40 cm

front view



top view



Quality of concrete:

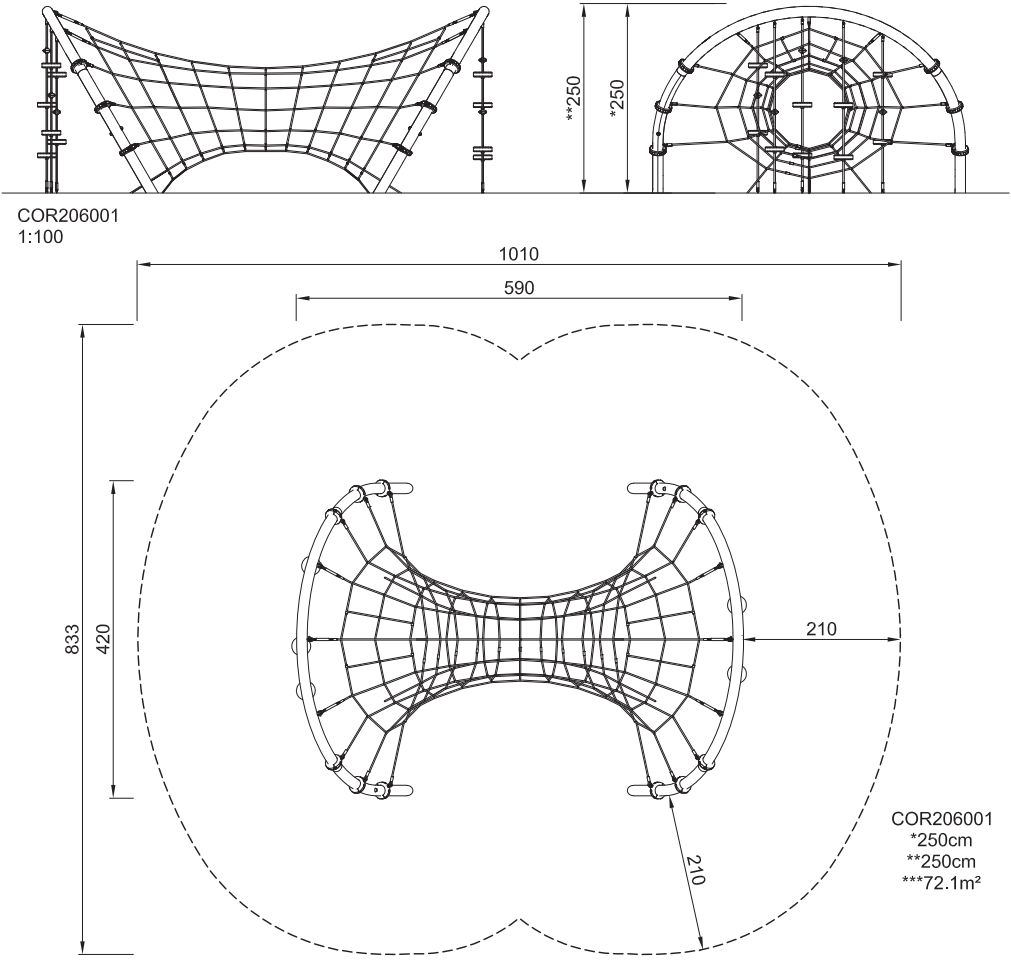
C25 / 30

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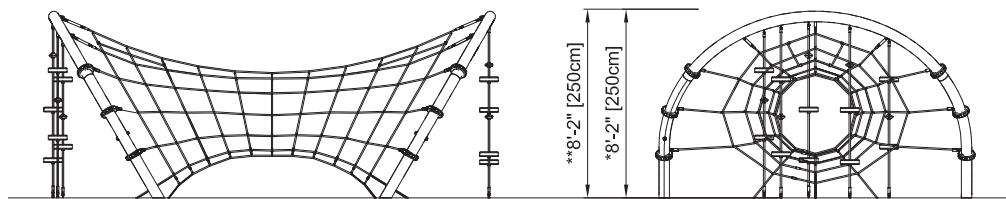
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scale 1:50

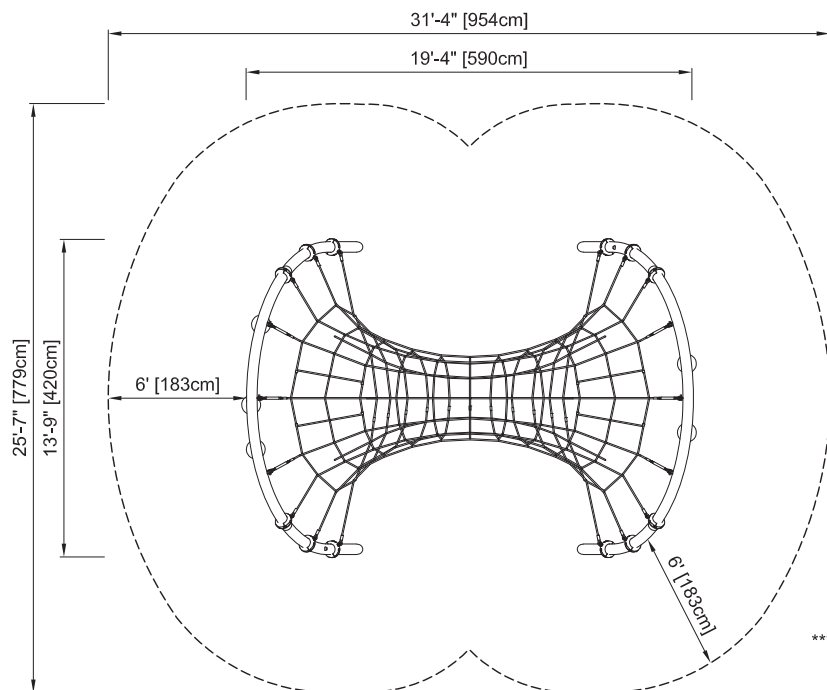
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ASTM F1487/CSA Z614

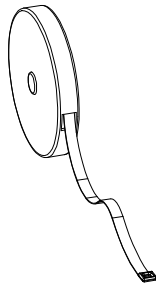


COR206001
1:100

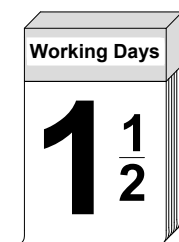
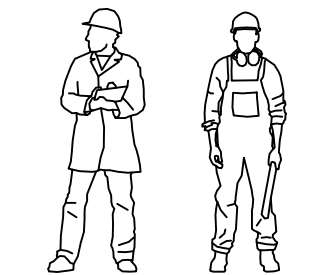
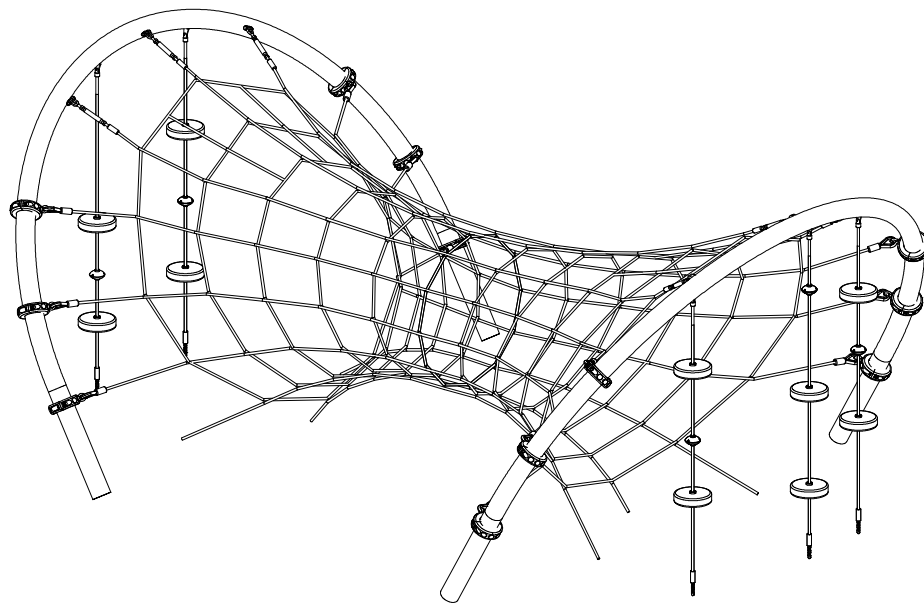


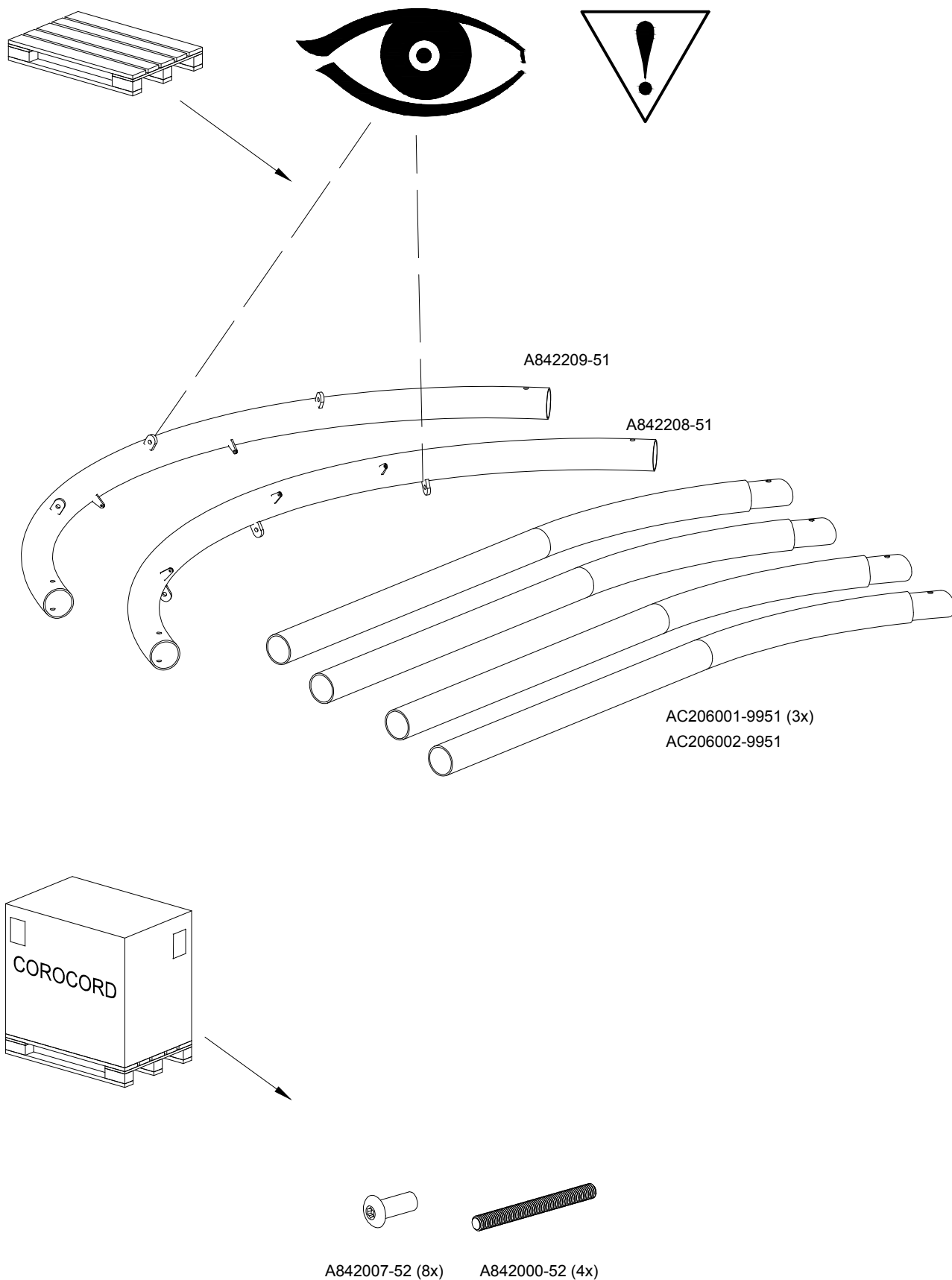
COR206001
* 8'-2" / 250cm
** 8'-2" / 250cm
*** 678.1ft² / 63.9m²

Installation instruction
 Montageanleitung
 Instructions de montage
 Indicaciones de montaje
 Istruzioni di montaggio
 Montagehandleiding
 Monteringsanvisning
 Monteringsvejledning
 Инструкция по установке
 Asennusohje

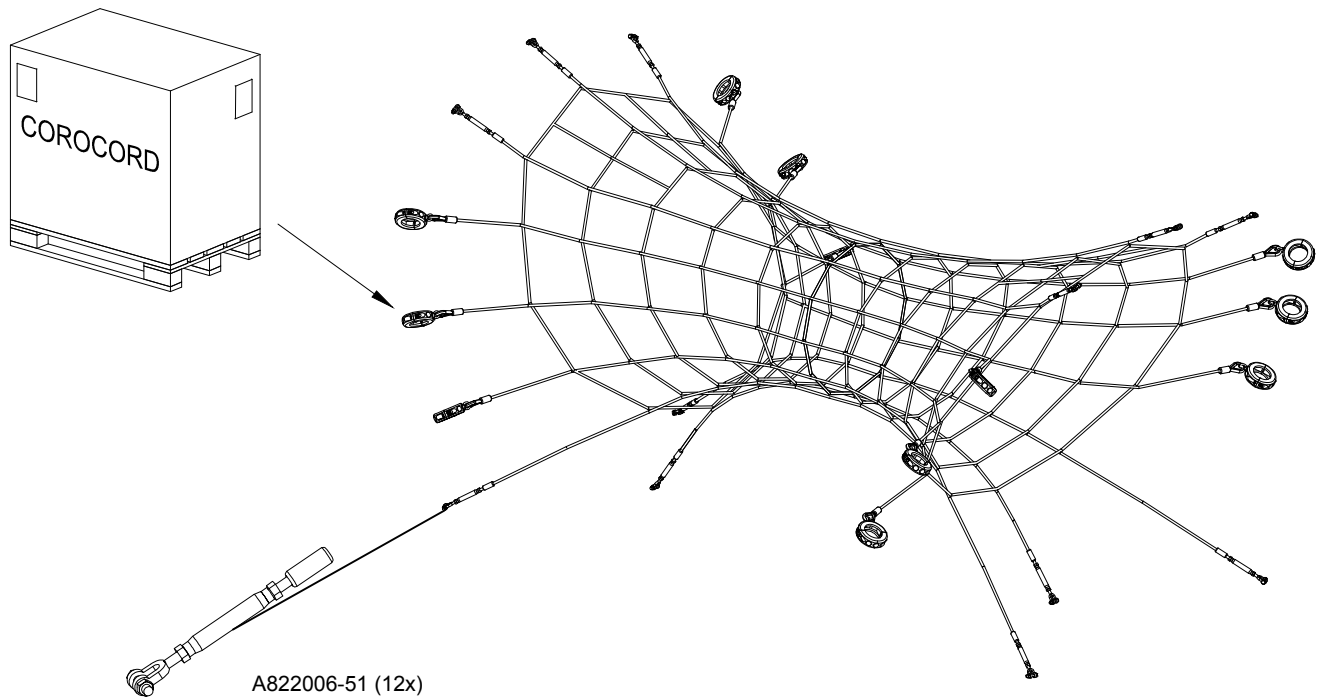


Check foundation before installation!
 Vor Montagebeginn Fundamentierung überprüfen!
 Vérifier les fondations avant de commencer le montage !
 ¡Compruebe la fundación antes de la instalación!
 Verificare le fondamenta prima di procedere all'installazione!
 Controleer fundering voor de installatie!
 Kontrollera fundament innan installation!
 Check fundament før installation!
 Перед установкой проверить основание!
 Tarkista ankkuroidin perustus ennen asennusta!





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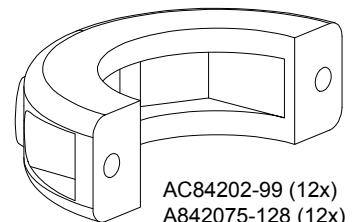
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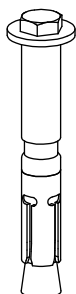
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OBV-1912022-A2 (24x)

AC84202-99 (12x)
A842075-128 (12x)

A842045-52 (5x)



340707912105 (5x)

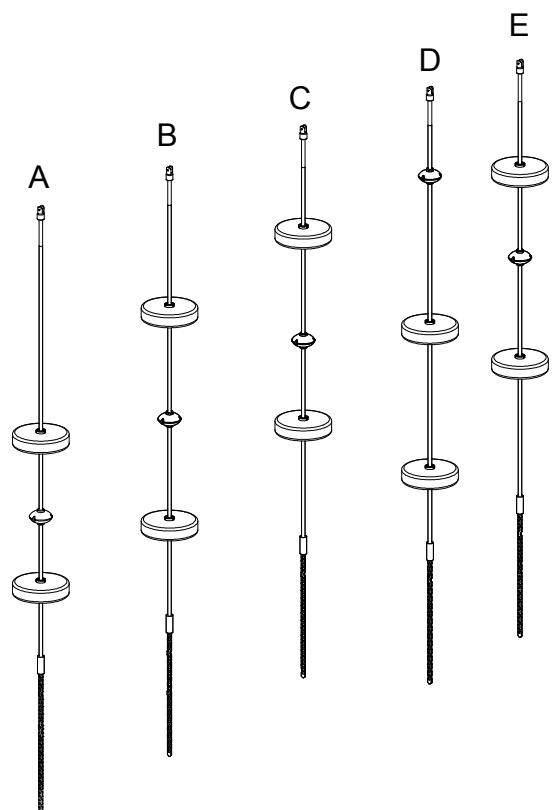
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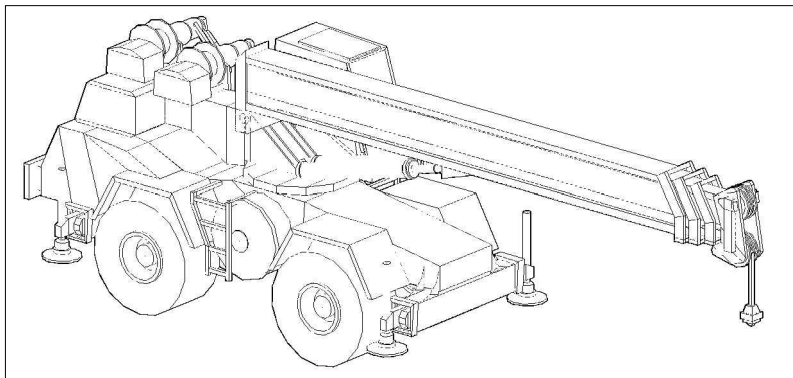
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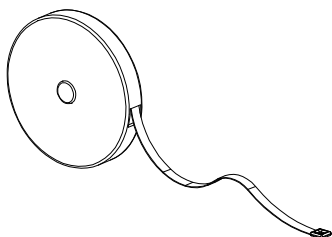
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E - N842005-11





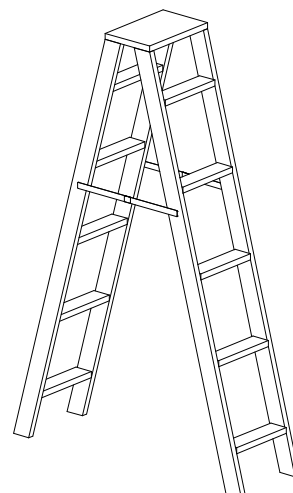
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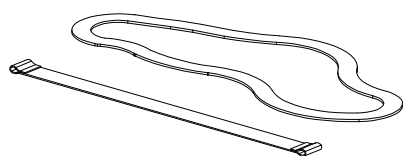
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1x



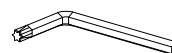
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1x

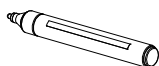


2x

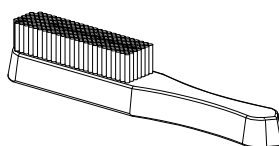


T 25

1x



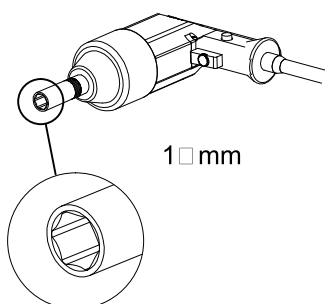
1x



1x



1x



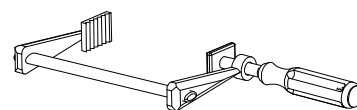
1 □ mm

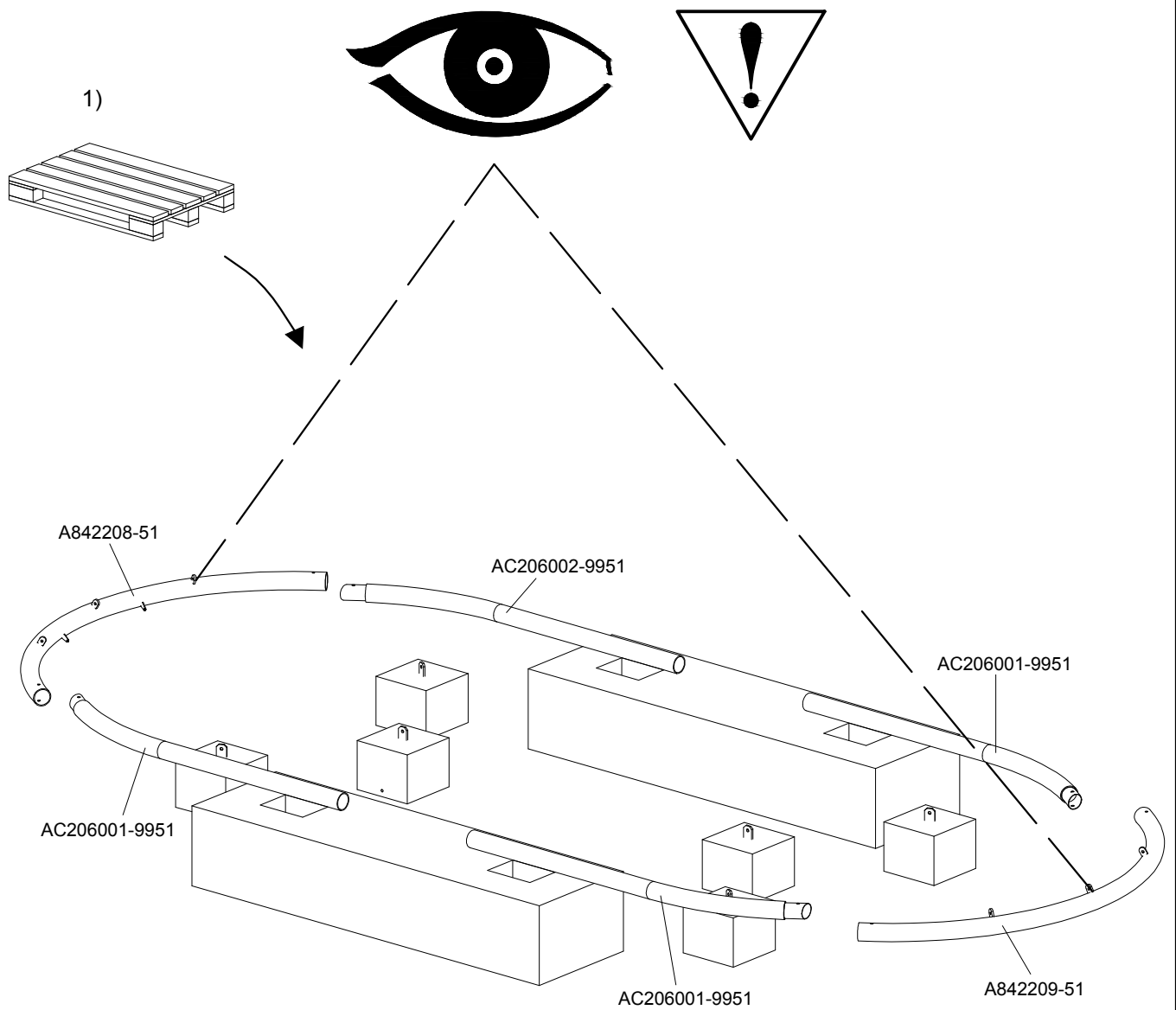
1x



1 □ mm
24 mm
30 mm

1x





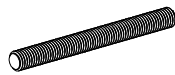
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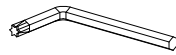


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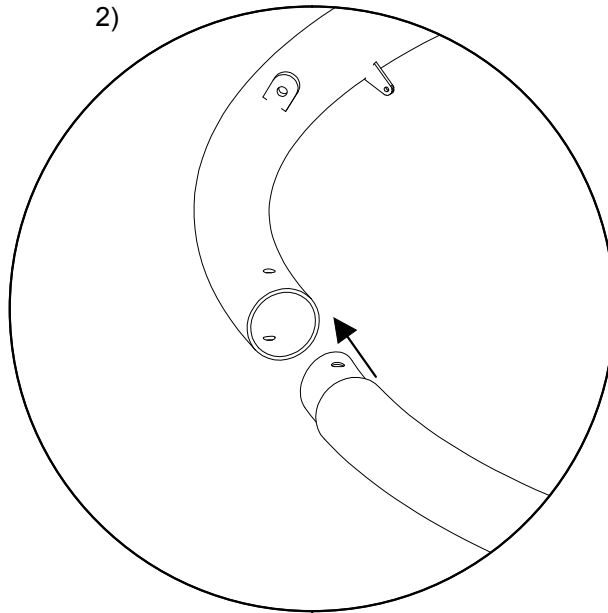
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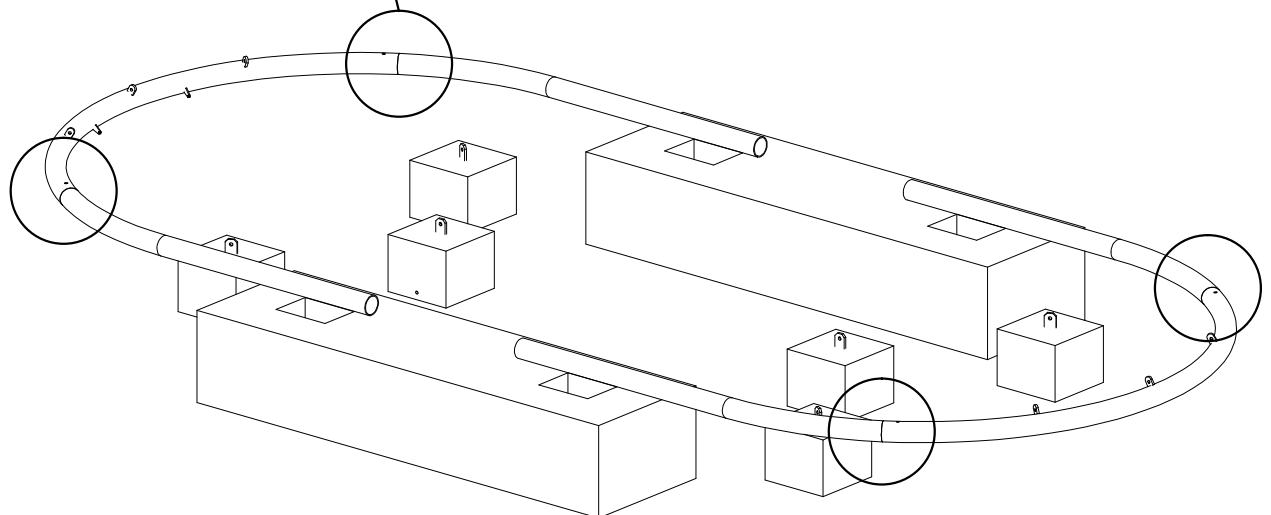
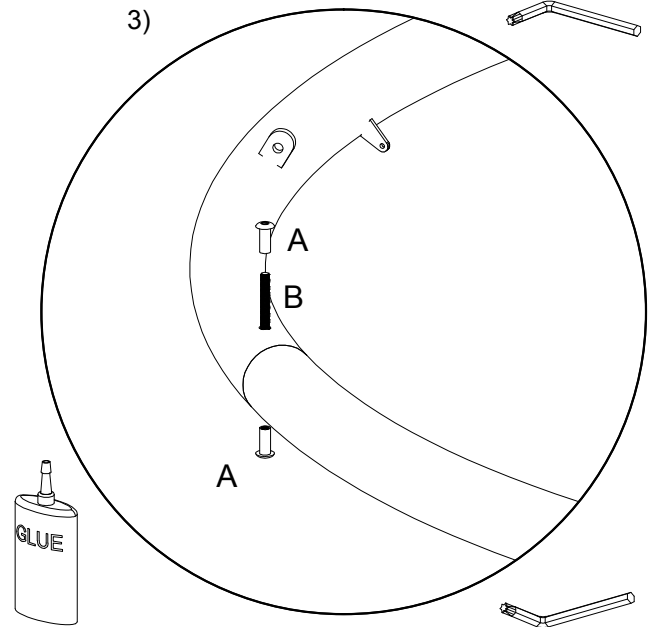
T 25



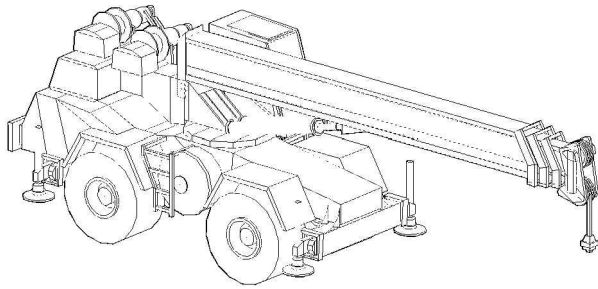
2)



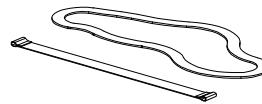
3)



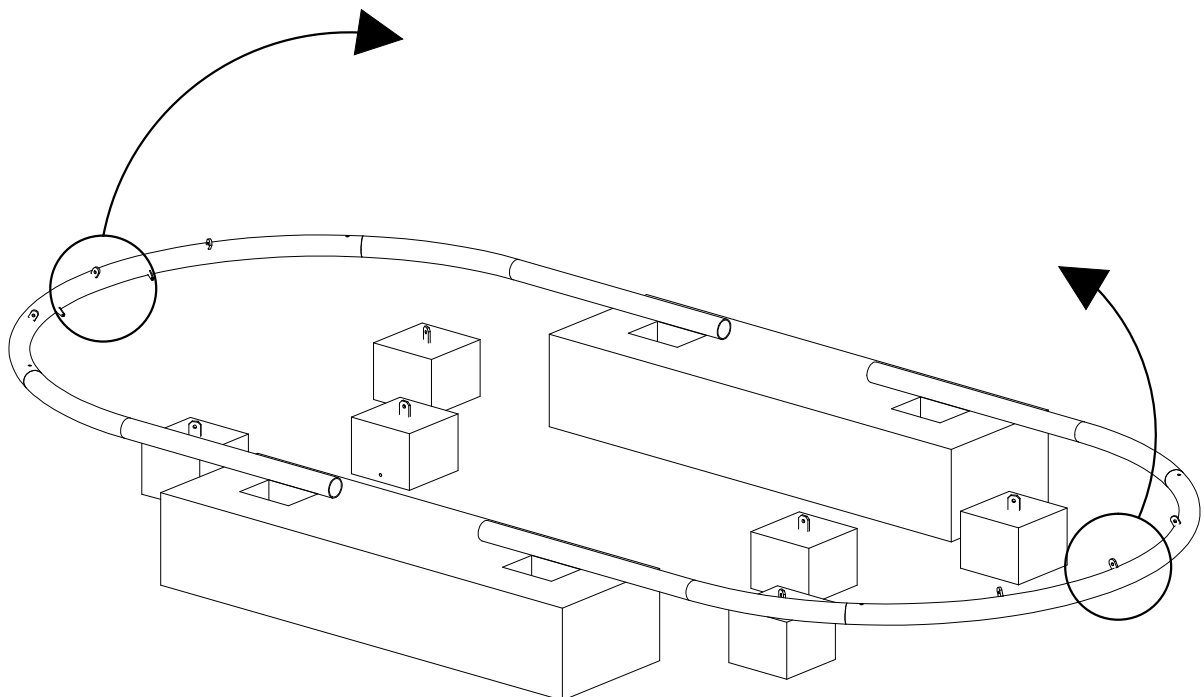
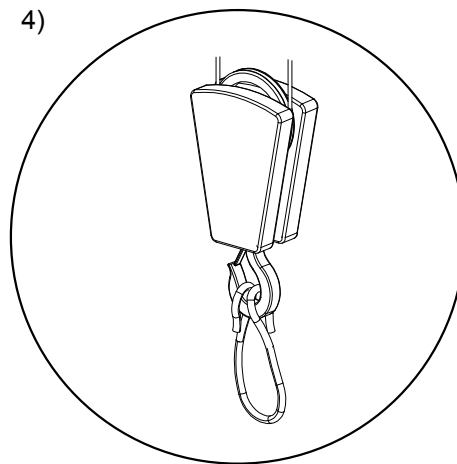
O:\2000E_Entdeckerwelten\2060\05_Montageanleitung_Wartungshinweise\M 2060 int.dwg



1x

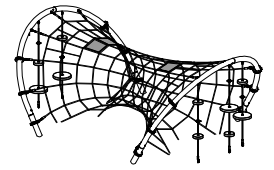


4)

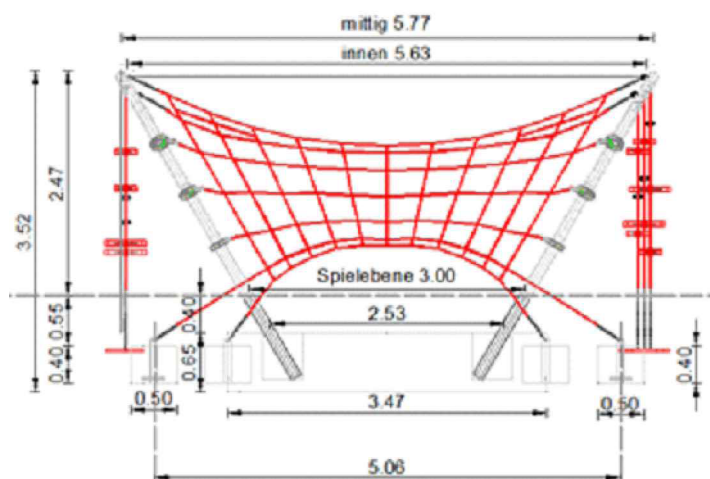
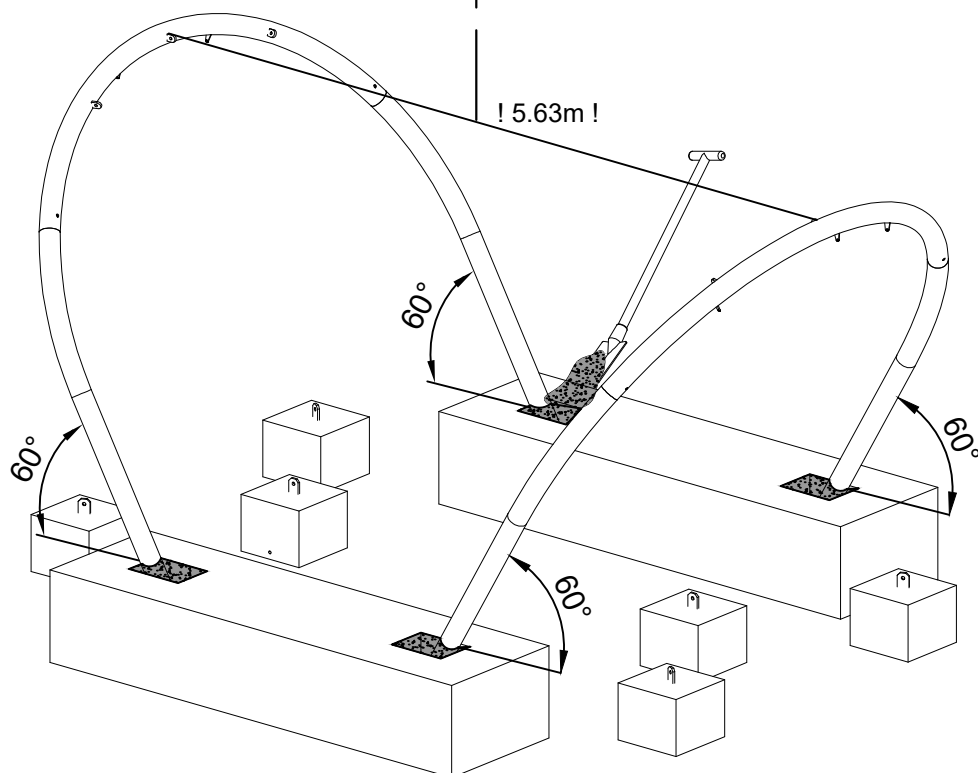


O:\2000E_Entdeckerwelten\2060\05_Montageanleitung_Wartungshinweise\2060 int.dwg

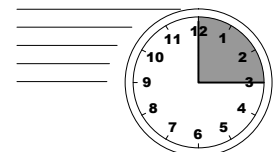
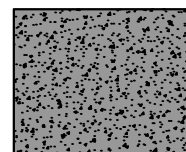
PLAN

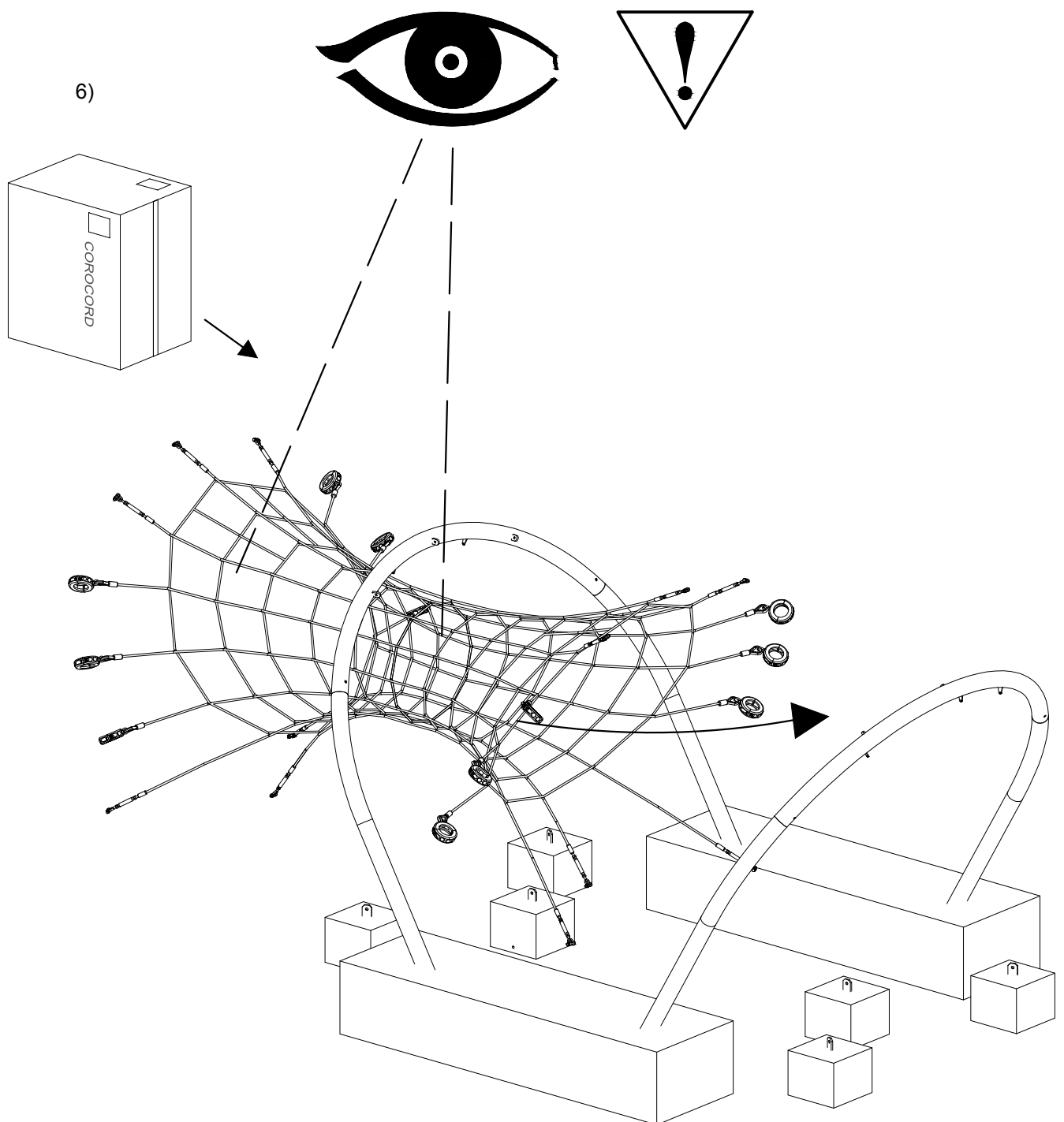


5)

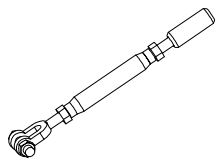


≥ 3 hours





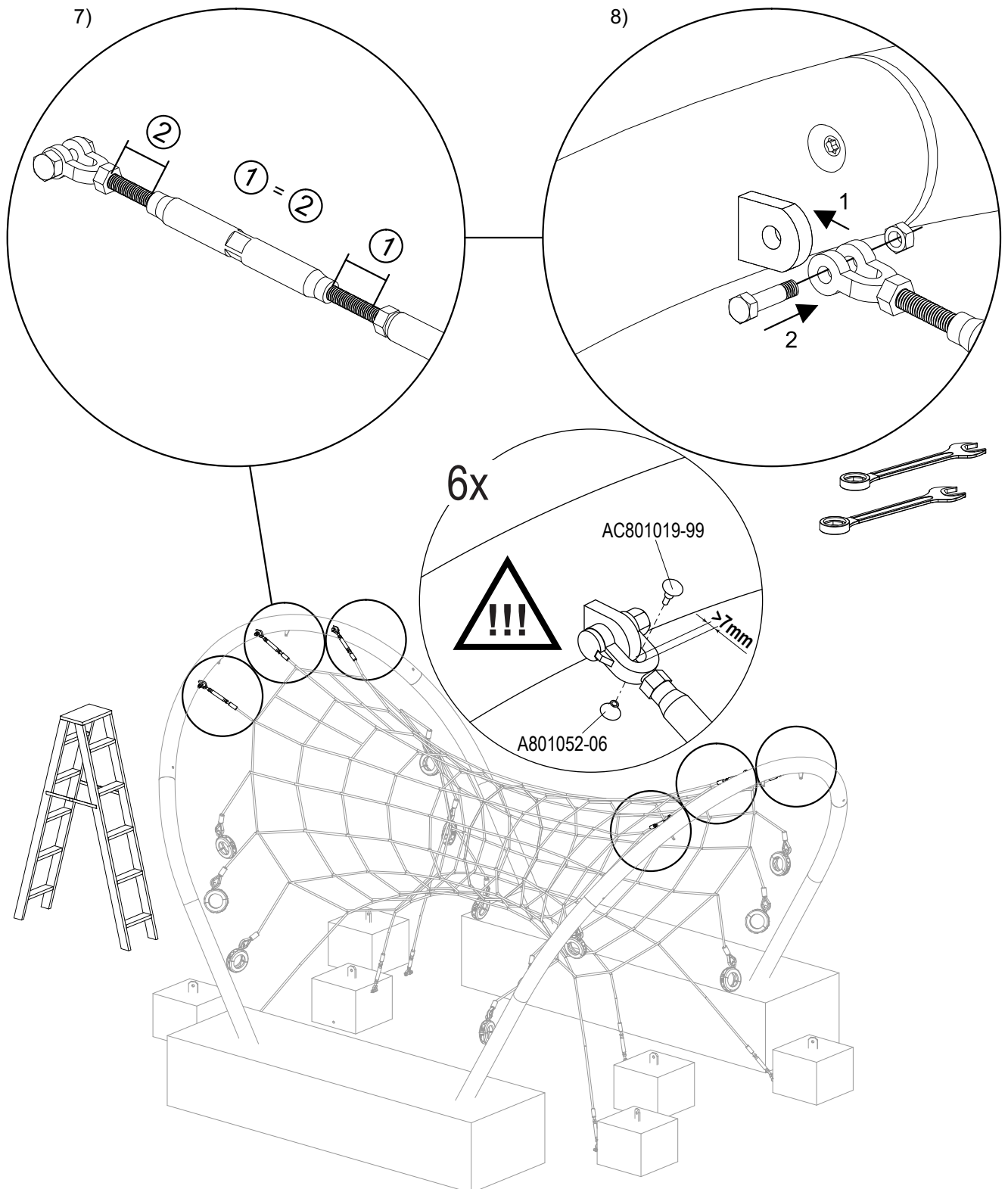
O:\2000E_Entdeckerwelten\2060\05_Montageanleitung_Wartungshinweise\2060 int.dwg



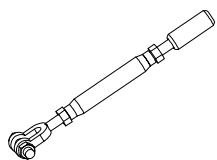
A822006-51 (6x)



30 mm



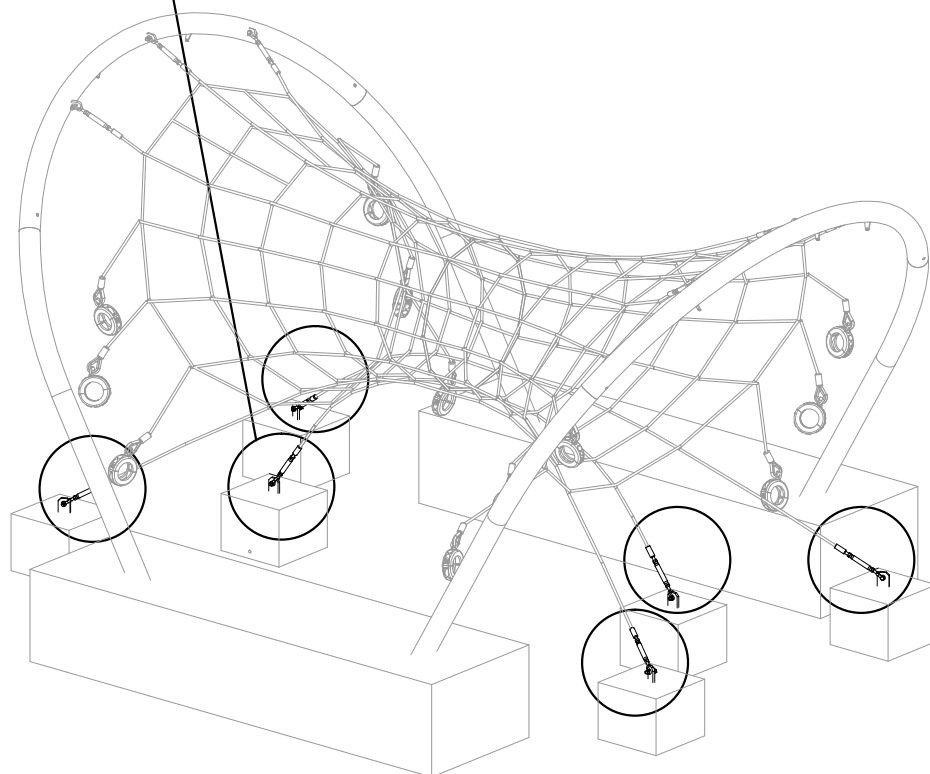
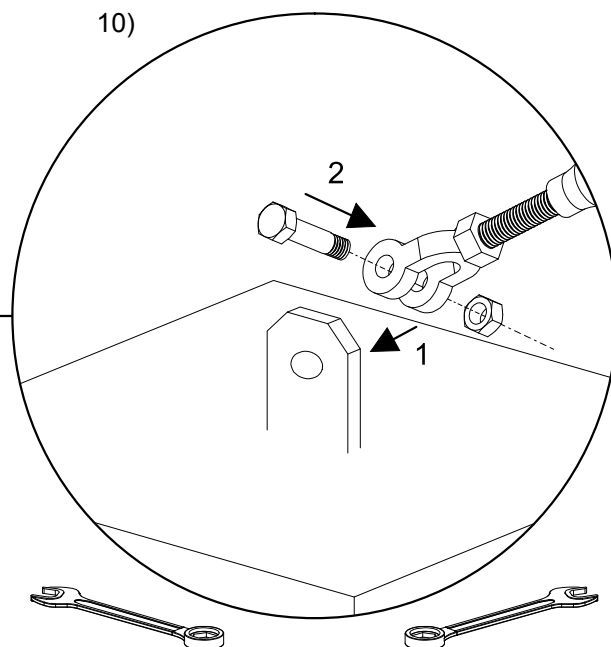
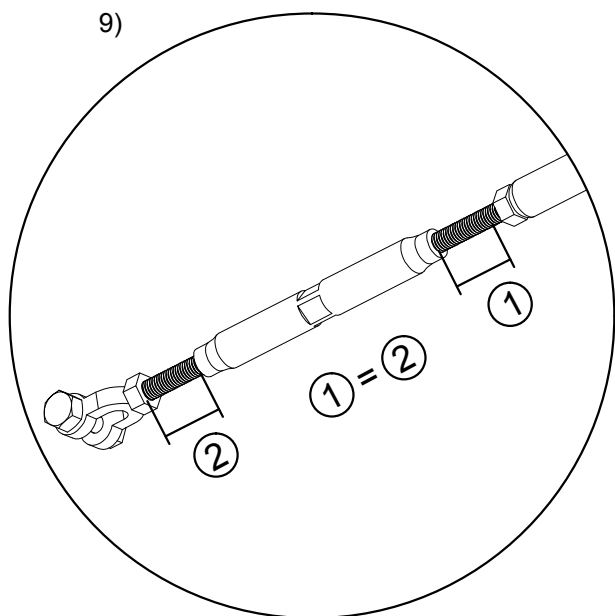
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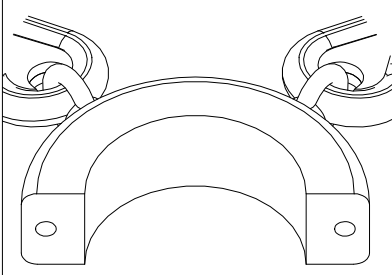
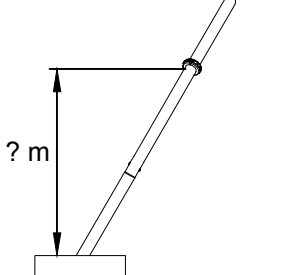
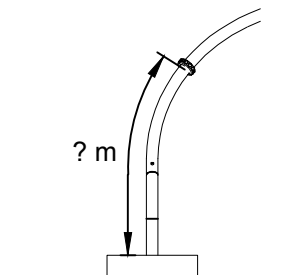
A822006-51 (6x)

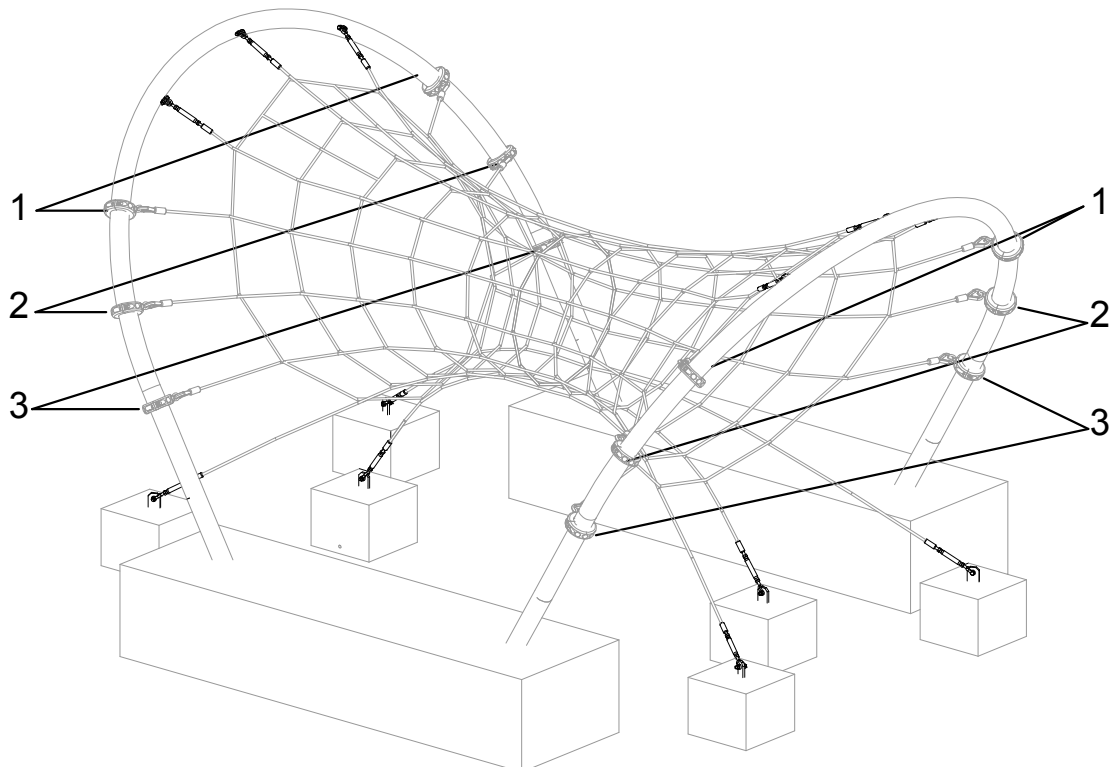
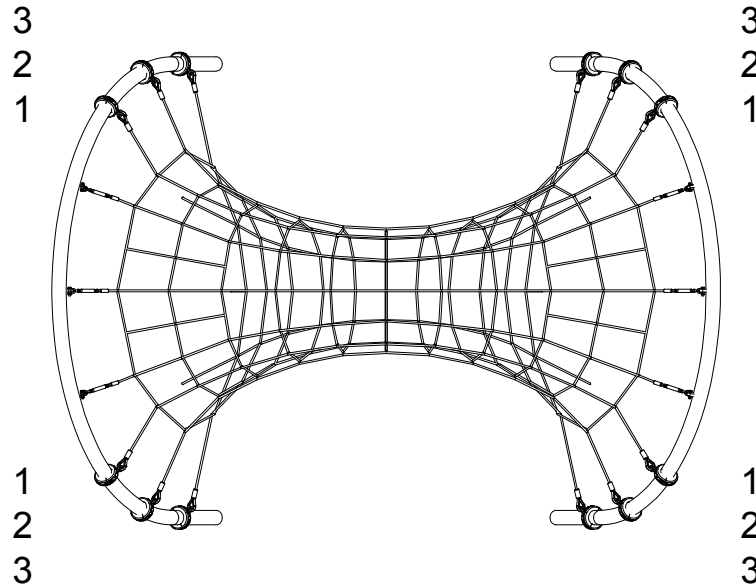


30 mm



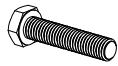
O:\2000E_Entdeckerwelten\2060\05_Montageanleitung_Wartungshinweise\2060 int.dwg

			
1	2,10	2,50	
2	1,40	1,60	
3	0,70	0,85	



O:\2000E_Entdeckerwelten\2060\05_Montageanleitung_Wartungshinweise\2060 int.dwg

A



200707412055 (24x)

B



201305013024 (72x)

C



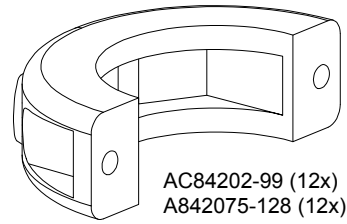
601100312 (24x)

D

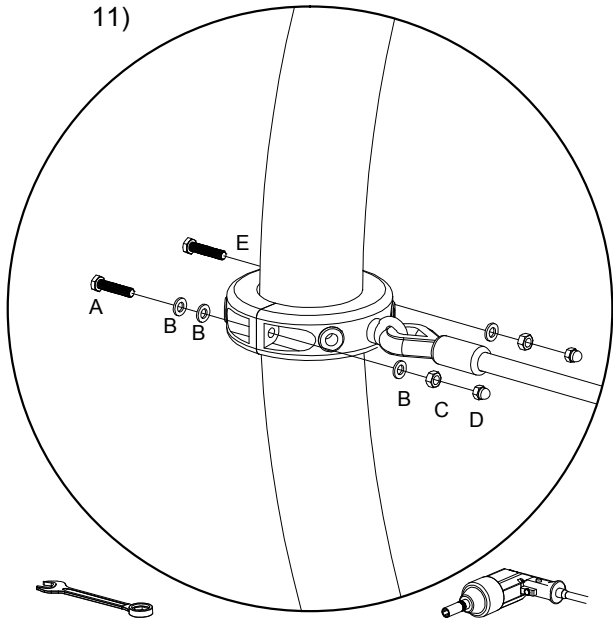


OBV-1912022-A2 (24x)

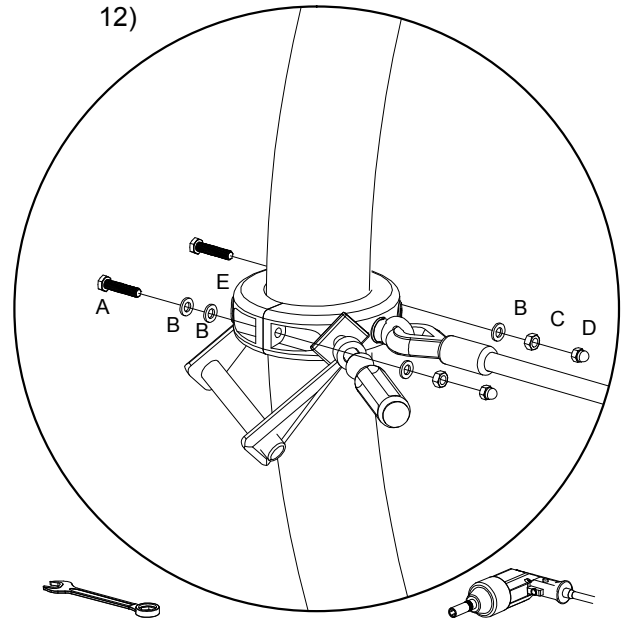
E

AC84202-99 (12x)
A842075-128 (12x)

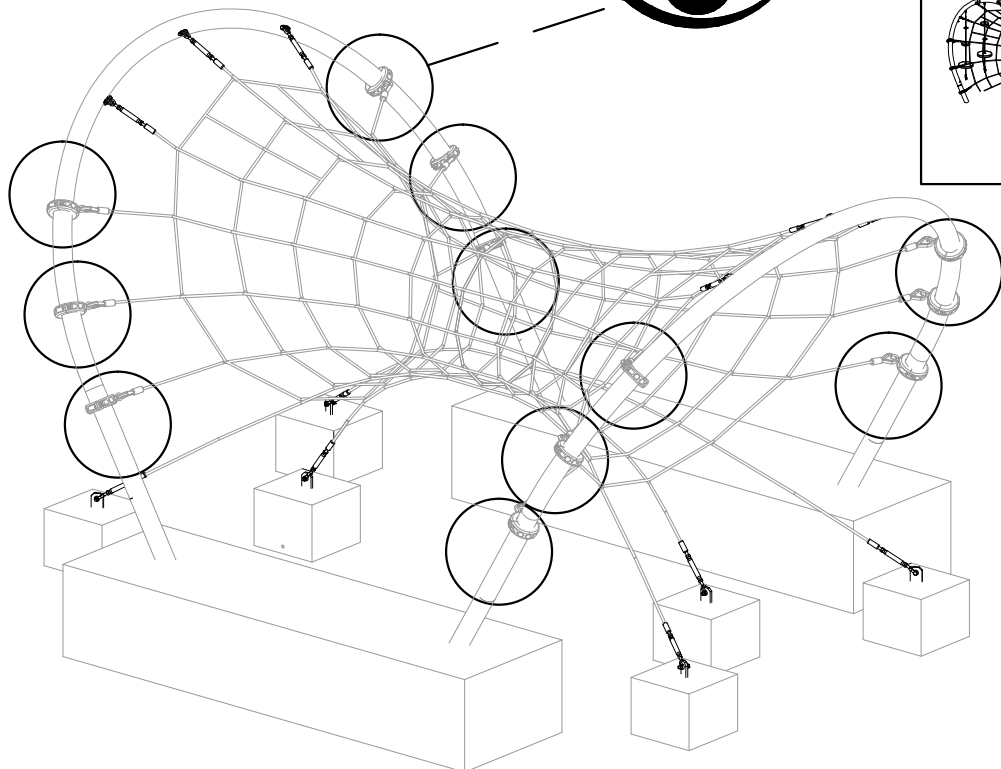
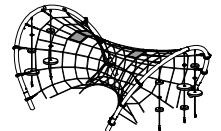
11)

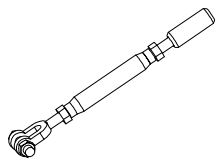


12)

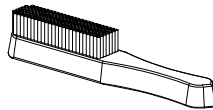


PLAN

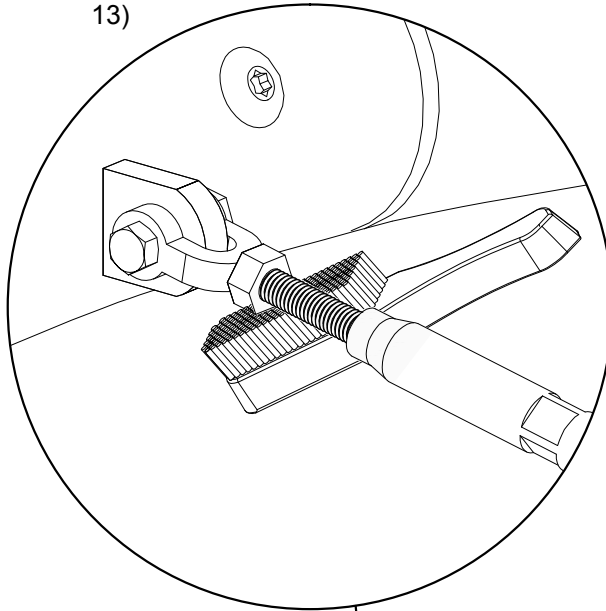




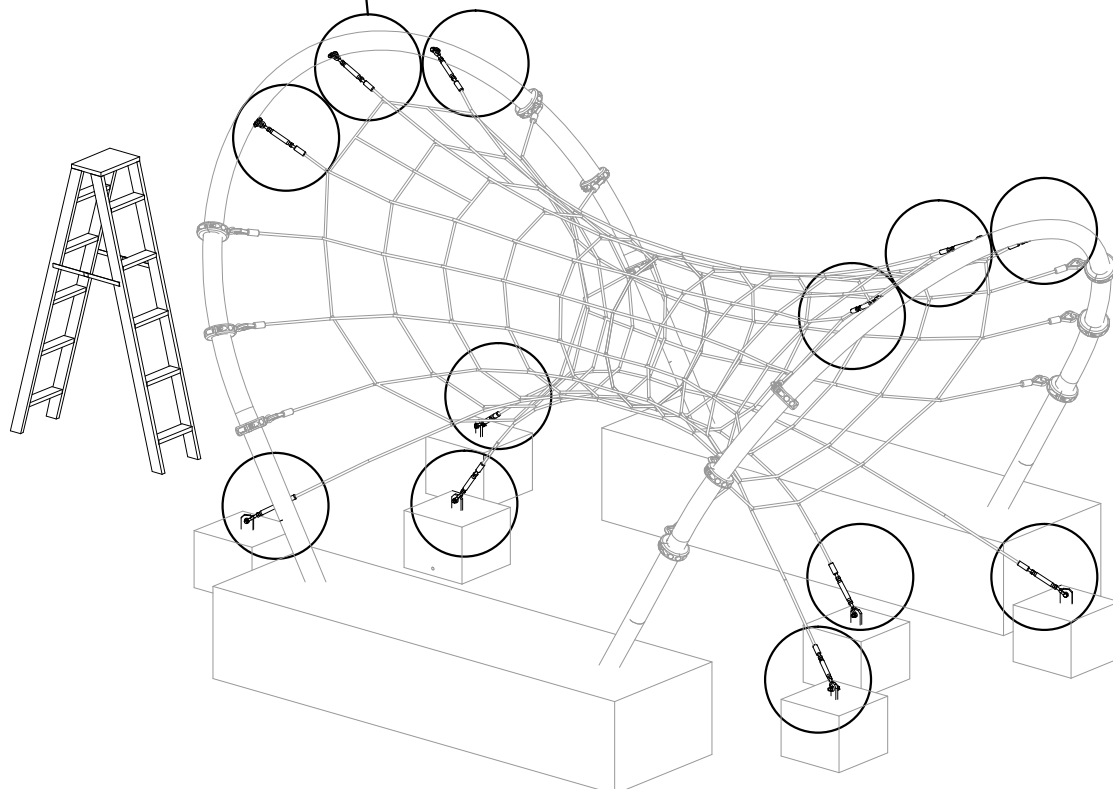
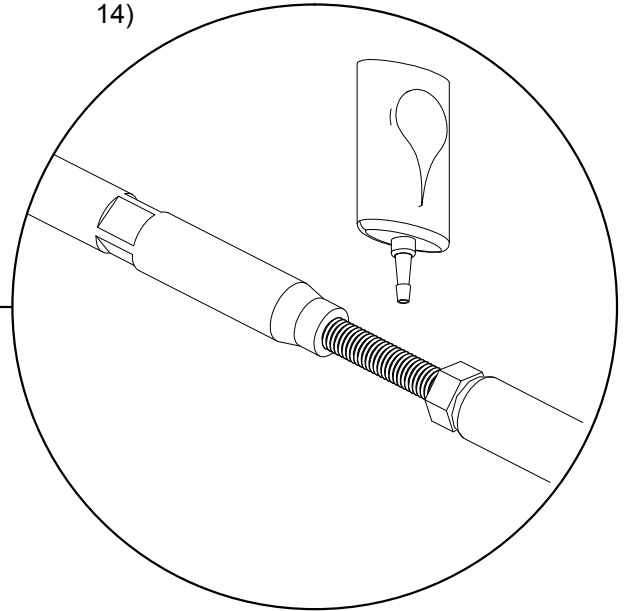
A822006-51 (12x)



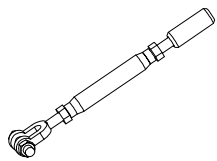
13)



14)



O:\2000E_Entdeckerwelten\2060\05_Montageanleitung_Wartungshinweise\2060 int.dwg

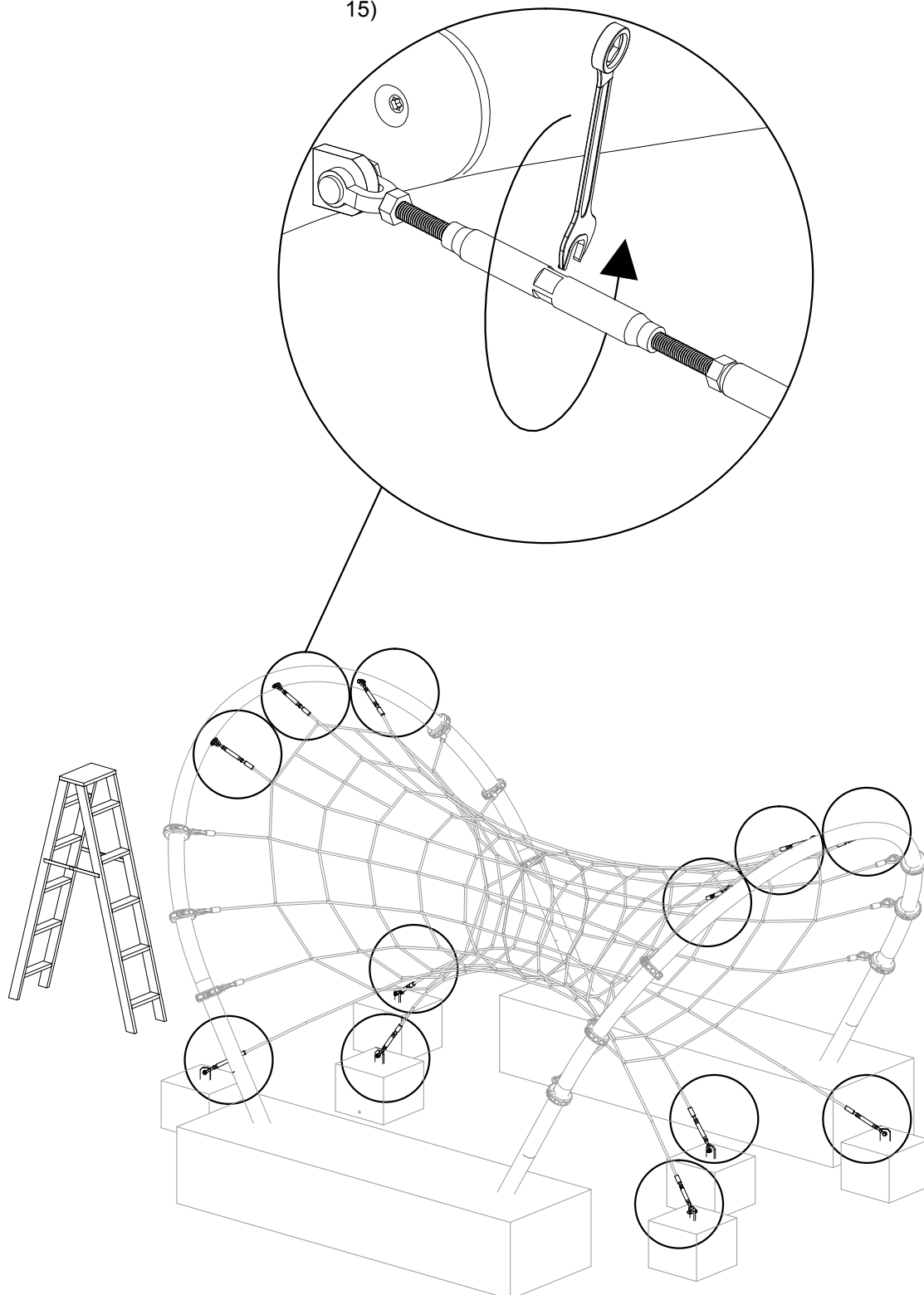


A822006-51 (12x)

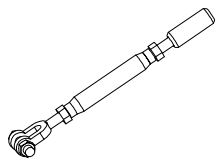


30 mm

15)



O:\2000E_Entdeckerwelten\2060\05_Montageanleitung_Wartungshinweise\2060 int.dwg

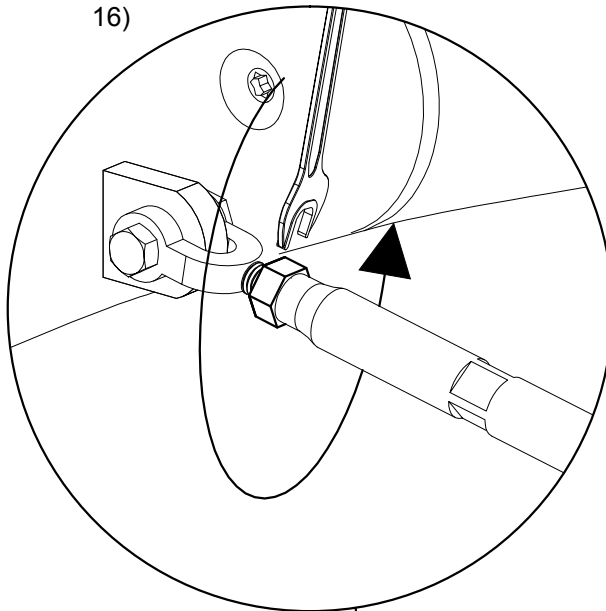


A822006-51 (12x)

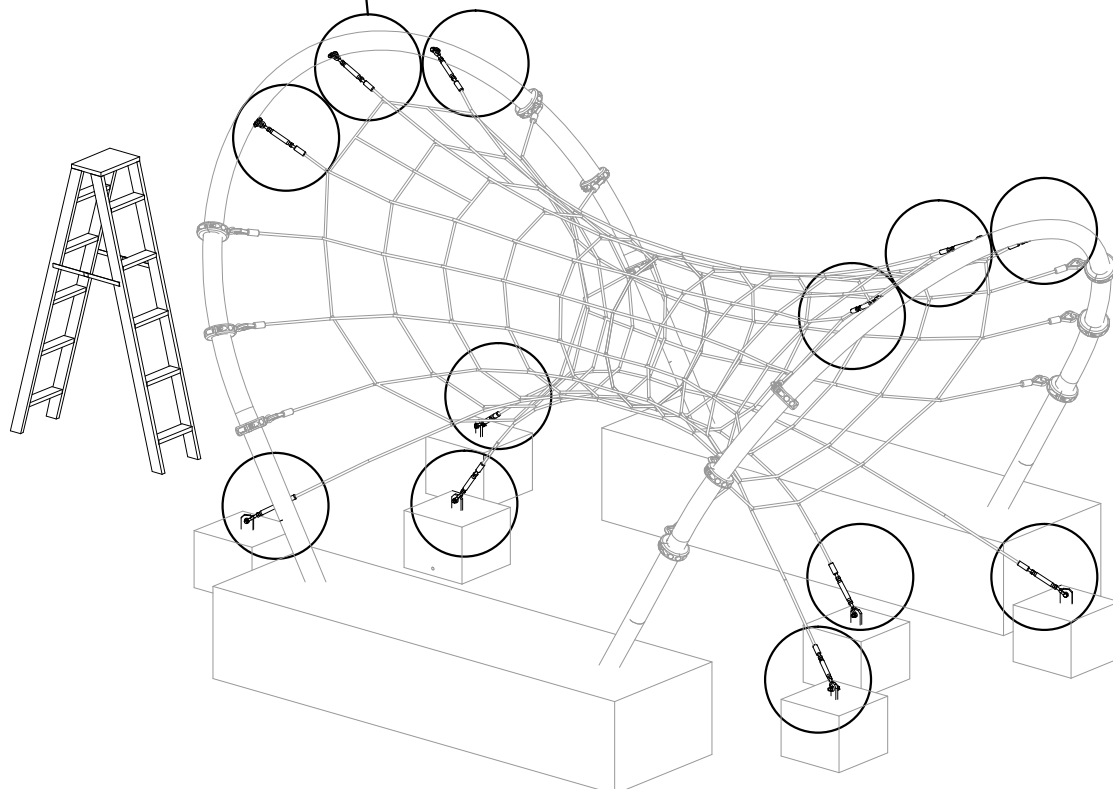
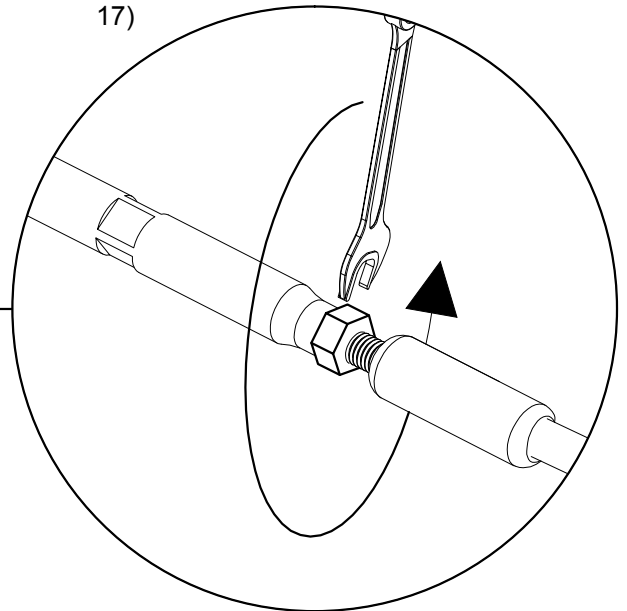


30 mm

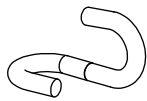
16)



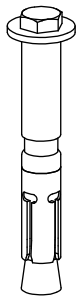
17)



O:\2000E_Entdeckerwelten\2060\05_Montageanleitung_Wartungshinweise\2060 int.dwg



A842045-52 (5x)



340707912105 (5x)

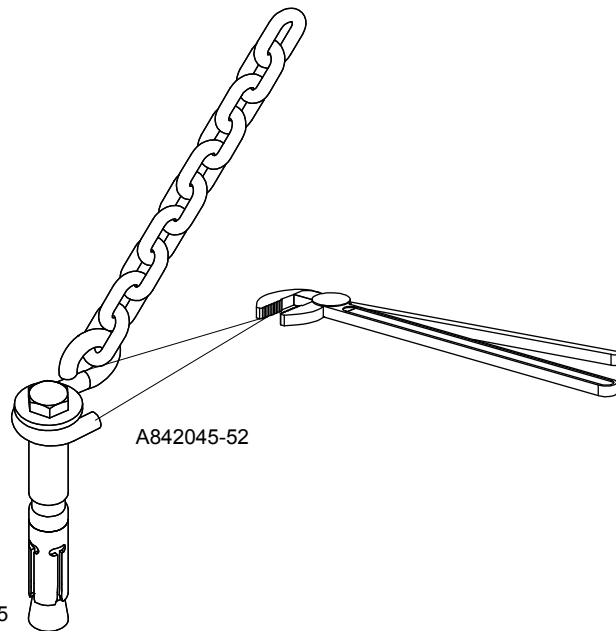
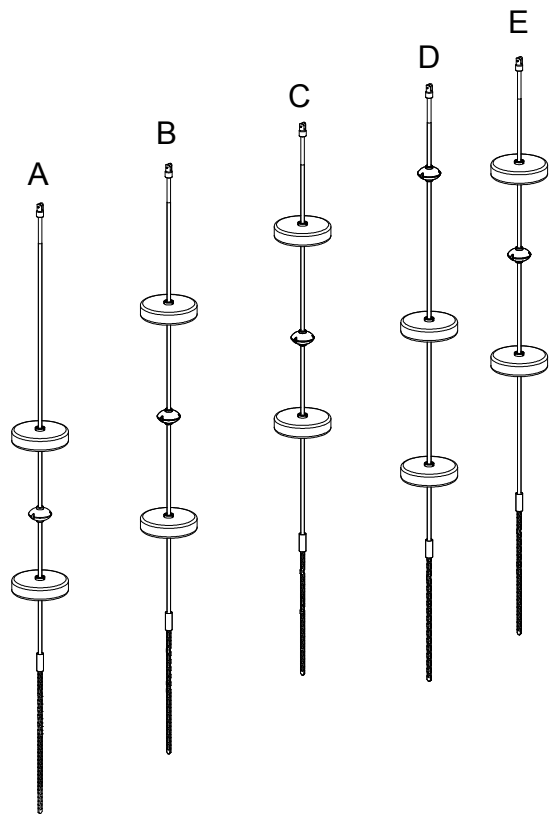
A - N842001-11

B - N842002-11

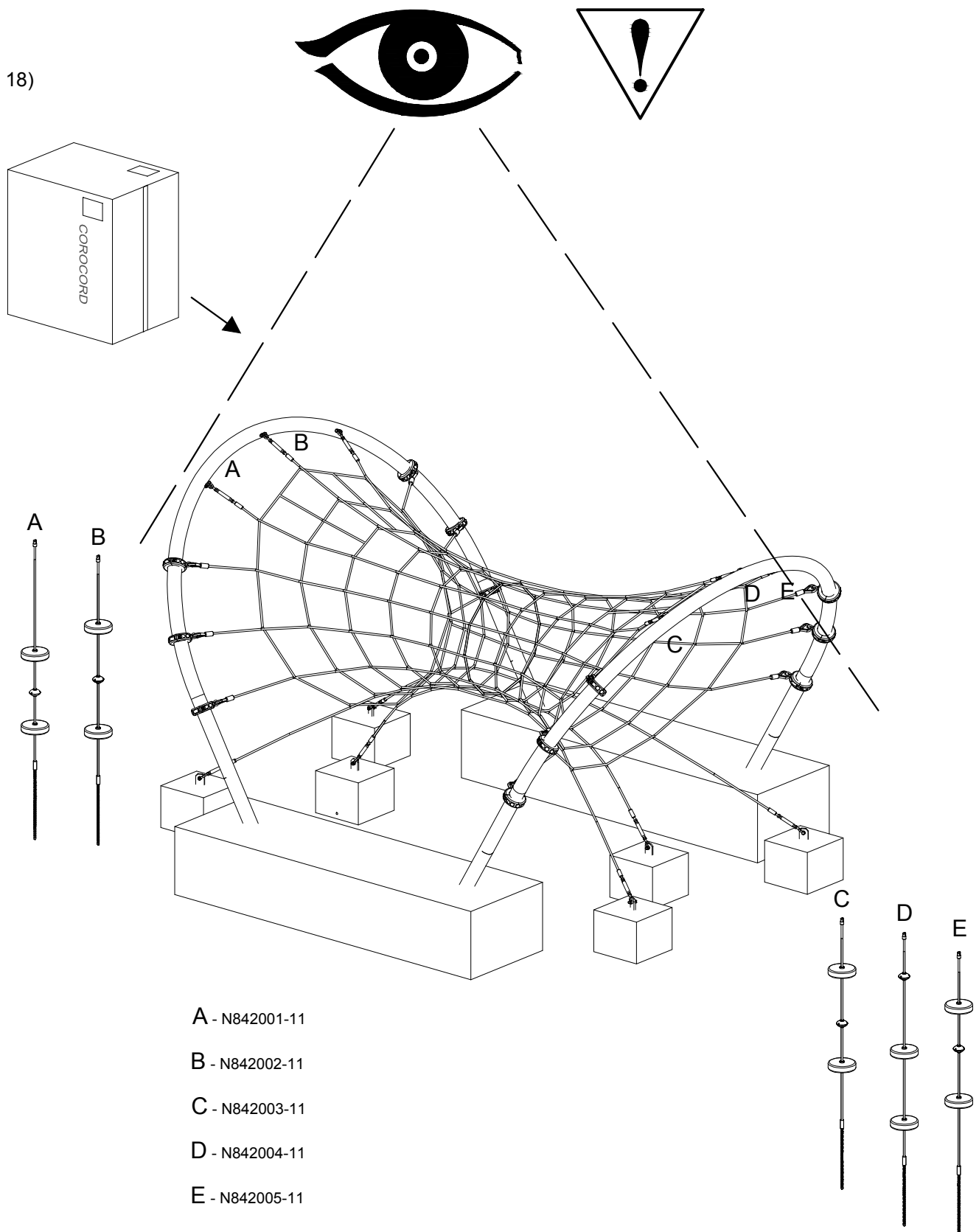
C - N842003-11

D - N842004-11

E - N842005-11



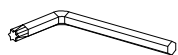
18)



O:\2000E_Entdeckerwelten\2060\05_Montageanleitung_Wartungshinweise\2060 int.dwg

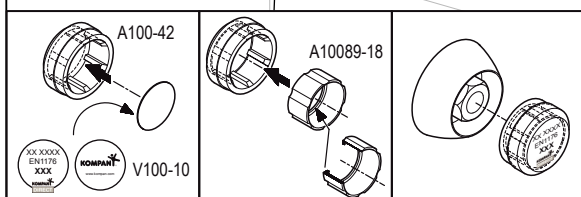
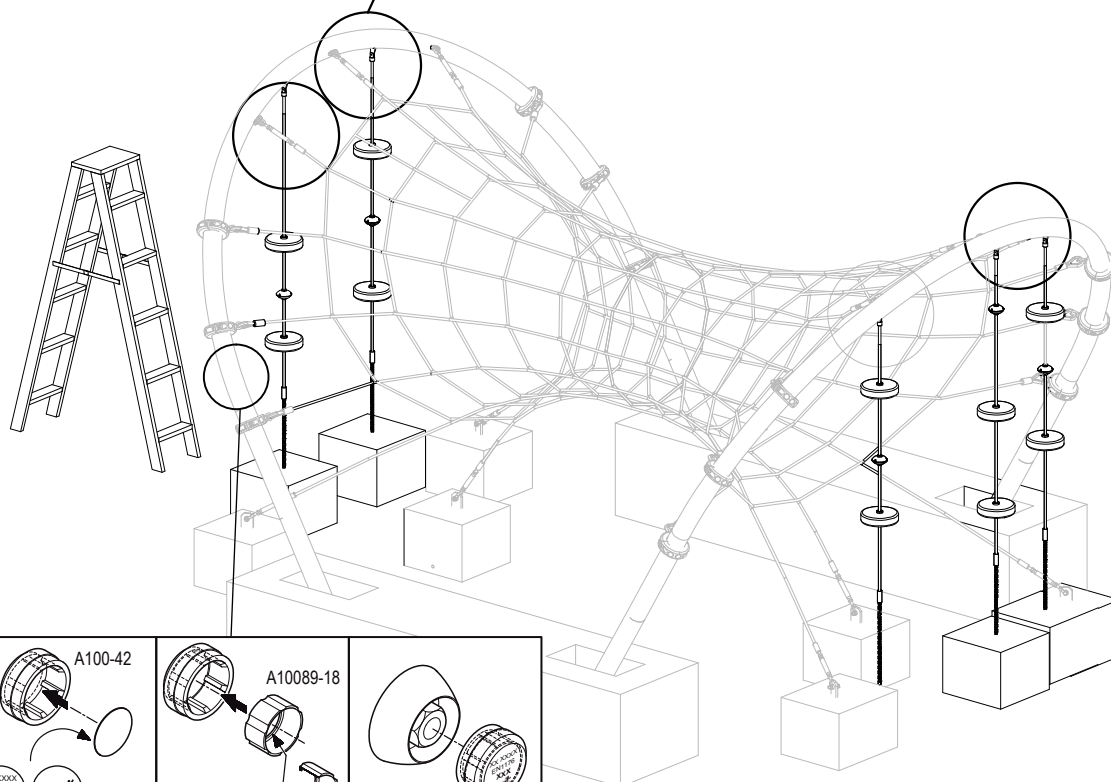
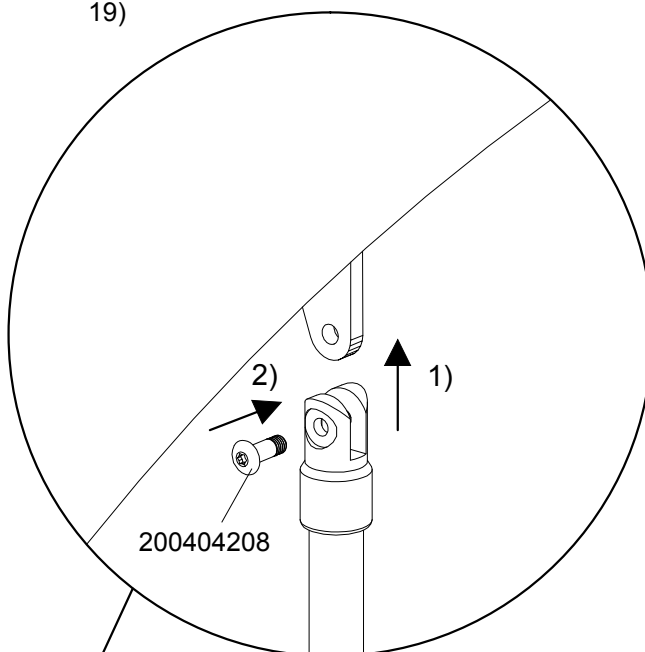


200404208



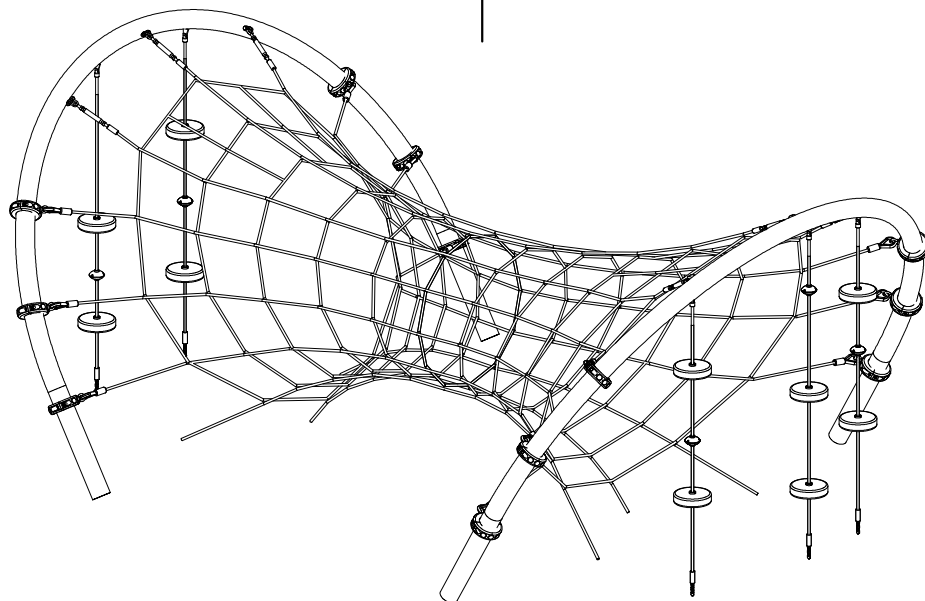
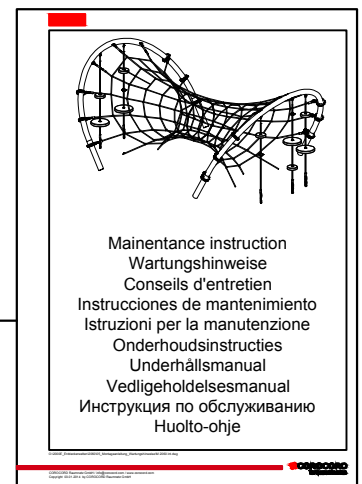
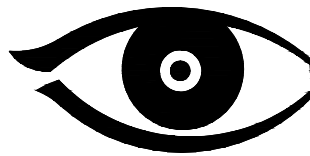
T 25

19)



O:\2000E_Entdeckerwelten\2060\05_Montageanleitung_Wartungshinweise\2060 int.dwg

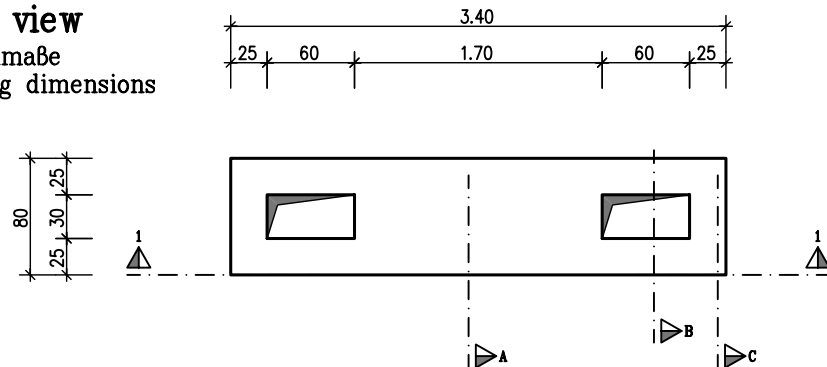
Please tension the net after 6 months!
 After that no more re-tensioning is required.
 Bitte nach 6 Monaten Gebrauch das Netz spannen!
 Danach ist kein Nachspannen mehr erforderlich.
 Tendre le filet après 6 mois d'utilisation !
 Il ne sera plus nécessaire de retendre ensuite le filet.
 ¡Tensa por favor la red después de 6 meses!
 Después no se tiene que retensar más.
 Si praga di verificare la tensione della rete dopo 6 mesi!
 Dopo di che la tensione non più è richiesto.
 Gelieve het net na 6 maanden na te spannen.
 Na 6 maanden is na spannen niet meer vereist; wel controleren.
 Vänligen efterspänn nätet efter 6 månader!
 Efter att inte mer spänning krävs.
 Venligst efterspænd nettet efter 6 måneder!
 Derefter er yderligere efterspænding unødvendig.
 Проверьте натяжение через 6 месяцев!
 При необходимости отрегулируйте натяжение.
 Uudelleenkiristä verkko 6 kk kuluttua!
 Tämän jälkeen verkkoa ei tarvitse enää kiristää.
 Παρακαλούμε τεντώσετε το δίχτυ μετά από 6 μήνες!
 Μετά από αυτό δεν χρειάζεται να ξανατεντωθεί.



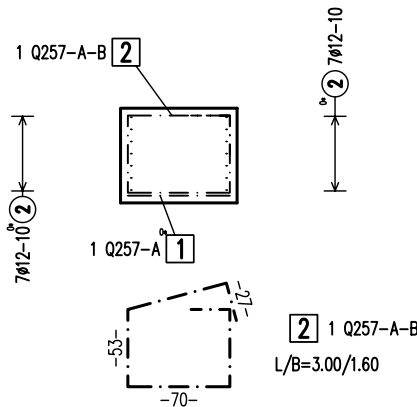
Fundamentbalken b/d=0,80x0,65 - l=3,40m
Foundation beams

Draufsicht
top view

Schalmaße
casing dimensions

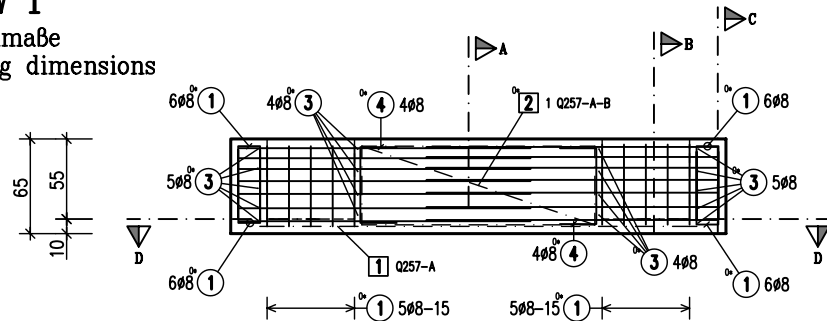


Schnitt A
sektion A

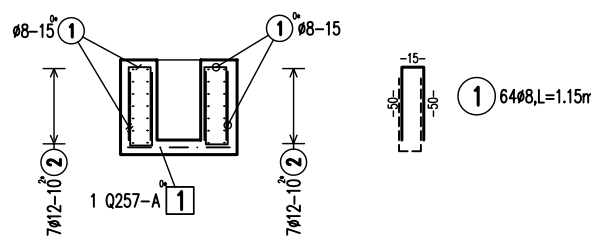


Ansicht 1
view 1

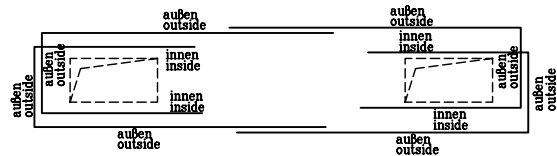
Schalmaße
casing dimensions



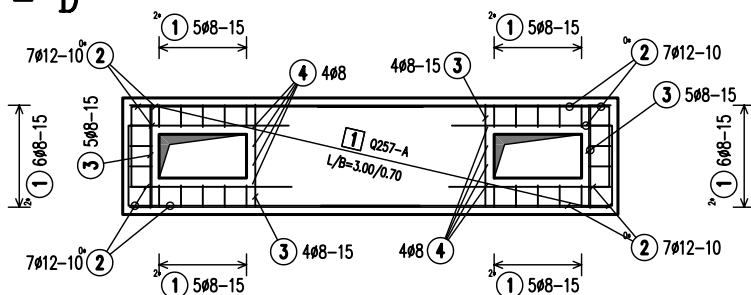
Schnitt B
sektion B



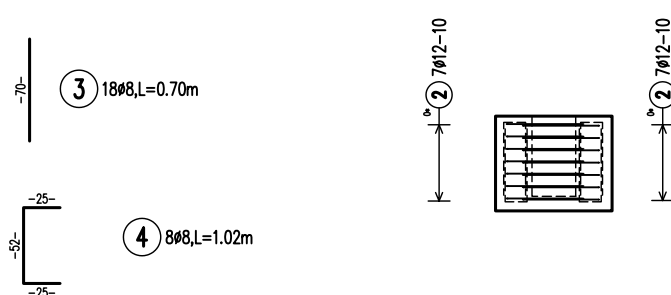
Verlegung Pos. 2
laying Pos. 2



Schnitt D - D
sektion D - D



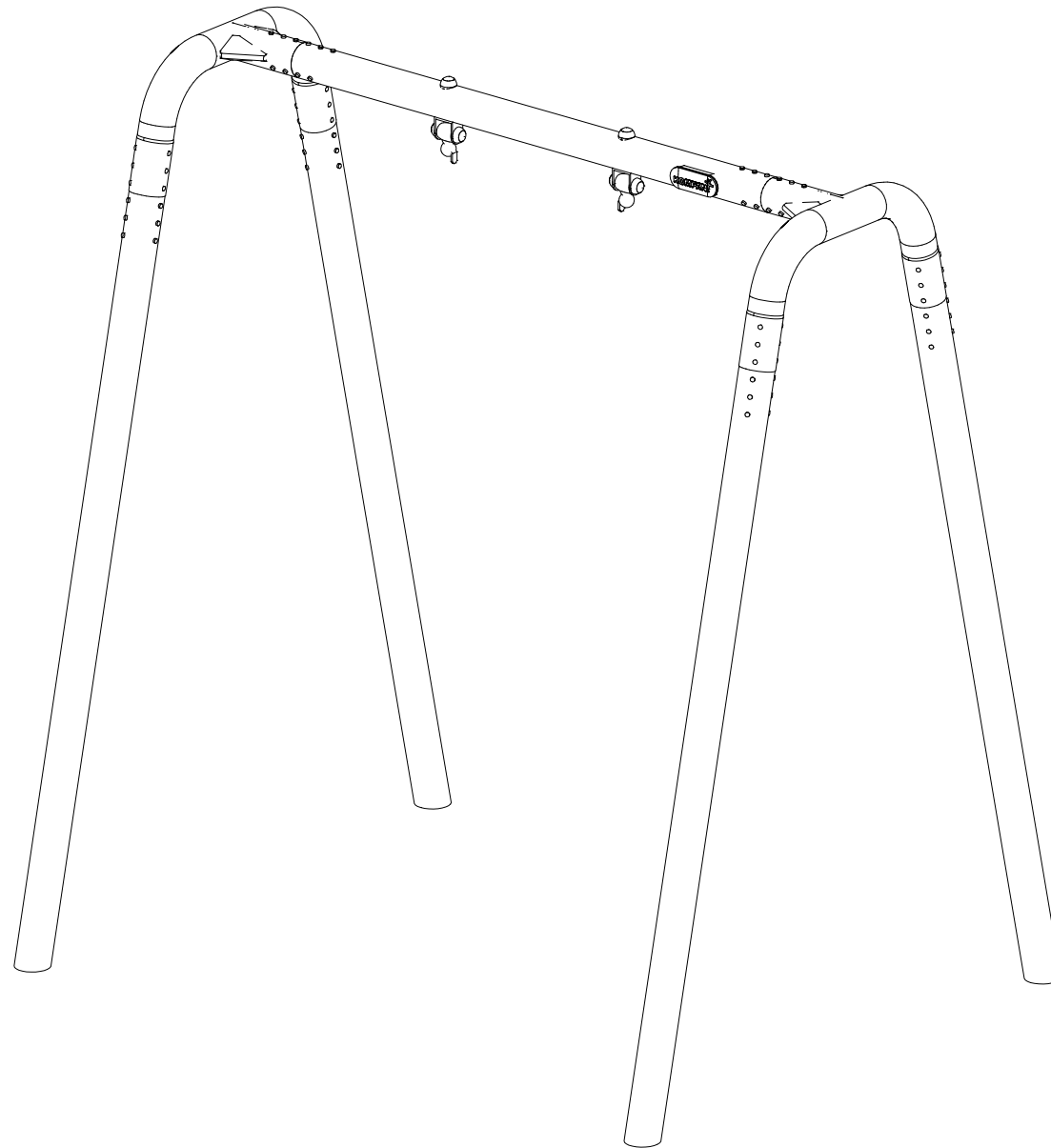
Schnitt C
sektion C



STAHL LISTE Betonstahl: BST 500S					
Pos.	Stk.	d	Länge	D8	D12
1	64	8	1.15	73.60	
2	28	12	3.65		102.20
3	18	8	0.70	12.60	
4	8	8	1.02	8.16	
Gesamtlängen			94.36	102.20	
kg / m			D8 0.395	D12 0.888	
kg / d			37.272	90.754	
Gesamtgewicht (kg)			128.026		

MATTEN LISTE Betonstahl: BST 500M					
Pos.	Stk.	Typ	Länge	Breite	Fläche
1	1	Q257-A	3.00	0.70	2.10
2	1	Q257-A-B	3.00	1.60	4.80
Gesamtstahlmenge					
Typ		Fl(m2)	kg/m2	Gewicht(kg)	
Q257-A		6.90	4.120	28.428	
Gesamtgewicht netto (kg)					28.428
B = Matte wird um die Querachse gebogen					
B = Mat is bent around the transverse axis					

Biege- und Verlegeanweisung Bending and displacing instruction			nach DBV-Merkblatt 2002-07 according to DBV-bulletin 2002-07		
					
Stabdurchmesser Bar diameter d _s in mm	6, 8, 10, 12 14, 16 20, 25, 28	min d _{kr} = 150mm min d _{kr} = 240mm min d _{kr} = 375mm	Stabdurchmesser Bar diameter d _s in mm	6, 8, 10, 12 14, 16 20, 25, 28	min d _{kr} = 40mm min d _{kr} = 64mm min d _{kr} = 175mm
Besondere Anforderungen: Particular requirement:					
Betonfestigkeitsklasse: Concrete grade: C25/30			Betonstahlsorte: Reinforcing steel: BSt 500S, BSt 500M		
Alle Maße der Betonstahlauszüge sind Außenmaße ! All dimensions of reinforcement are outer dimensions!					
letzte Stabstahlposition 4			last position of reinforcing bars		
letzte Mattenposition 2			last position of reinforcing mats		
Betondeckung [mm] Concrete cover [mm]	Expositionsklasse Exposition class	Verlegemaß c _v Displace size c _v	Vorhaltemaß Δc Allowance Δc	Nennmaß c _{nom} Nominal size c _{nom}	
oben/außen upside/outside	XC4-XF1-WF	5,0			
unten/innen downside/inside	XC4-XF1-WF	5,0			
seitlich beside	XC4-XF1-WF	5,0			
<div><div></div></div>					
Änderung: Revision:	Bezeichnung: Description:			erstellt: rendered:	Datum: Date:
Maßstab: Scale:	1:25	Blattgr.: size:	.84*.55m		Datum: Date: 16.04.2013
zug. Pläne: app. plans:			erstellt: rendered: Steven Wesley		
Planart: Planing type: Schal- und Bewehrungsplan formwork and reinforcement drawings			geprüft: reviewed:		
Bauteile: Components: Fundamentbalken Foundation beams					
Bauherr: Building owner: Spielmuschel					
Bauvorhaben: Building project: Spielmuschel					
Dr.SCHROETER &Dr.KNEIDL BERATENDE INGENIEURE GMBH				Projekt/Project: 2013.04	
An den Städeln 3 * 92637 Weiden i.d.OPf. Telefon 0961-38159-0 * FAX 0961-61968				Plan-Nr./Sheets-No.: SB-1	
Soficad-Dateiname: P:\GMBH\2013\201304_COROCORD_Spielmuschel\SB-1.dwg					



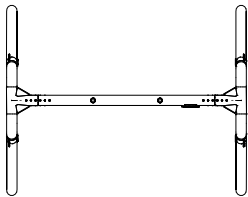


KSW921

ID ----

JIRPET

2021-06-16



Scale: 1:50

Foundation: 90 cm

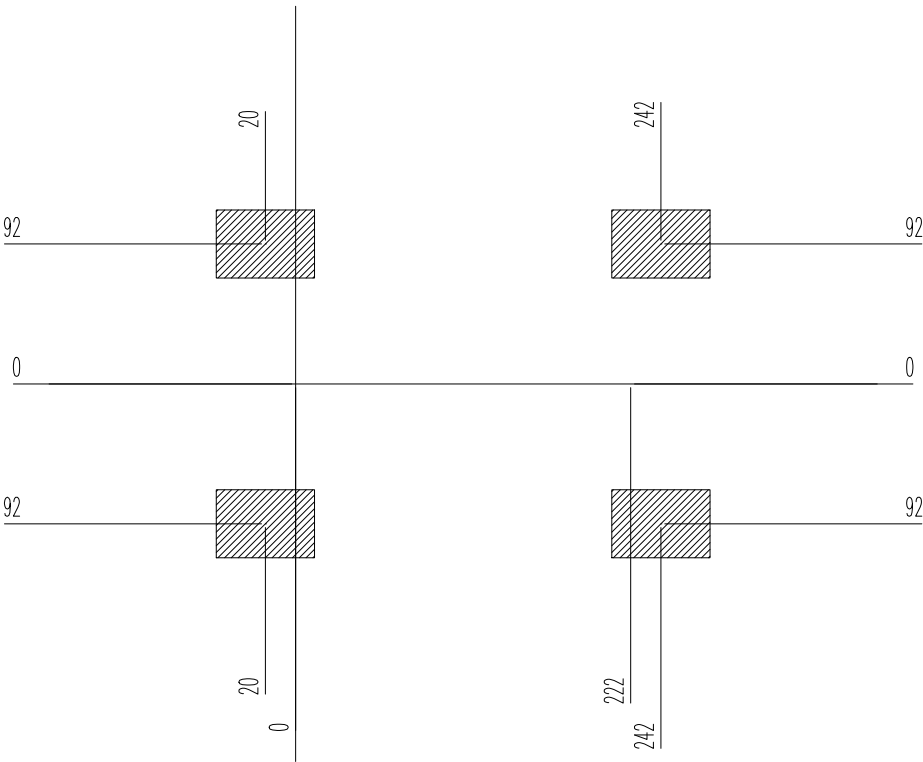
All Unspecified Holes

=

16A

Beton
Betón
Concrete
Hormigón
Béton
Cemento
Betón
Betong

0 m³ 0 cu.ft.

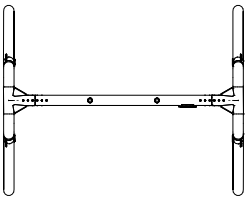


KSW921

ID ----

JIRPET




2021-06-16



Scale: 1/4" = 1'-0"

Foundation: 90 cm

All Unspecified Holes

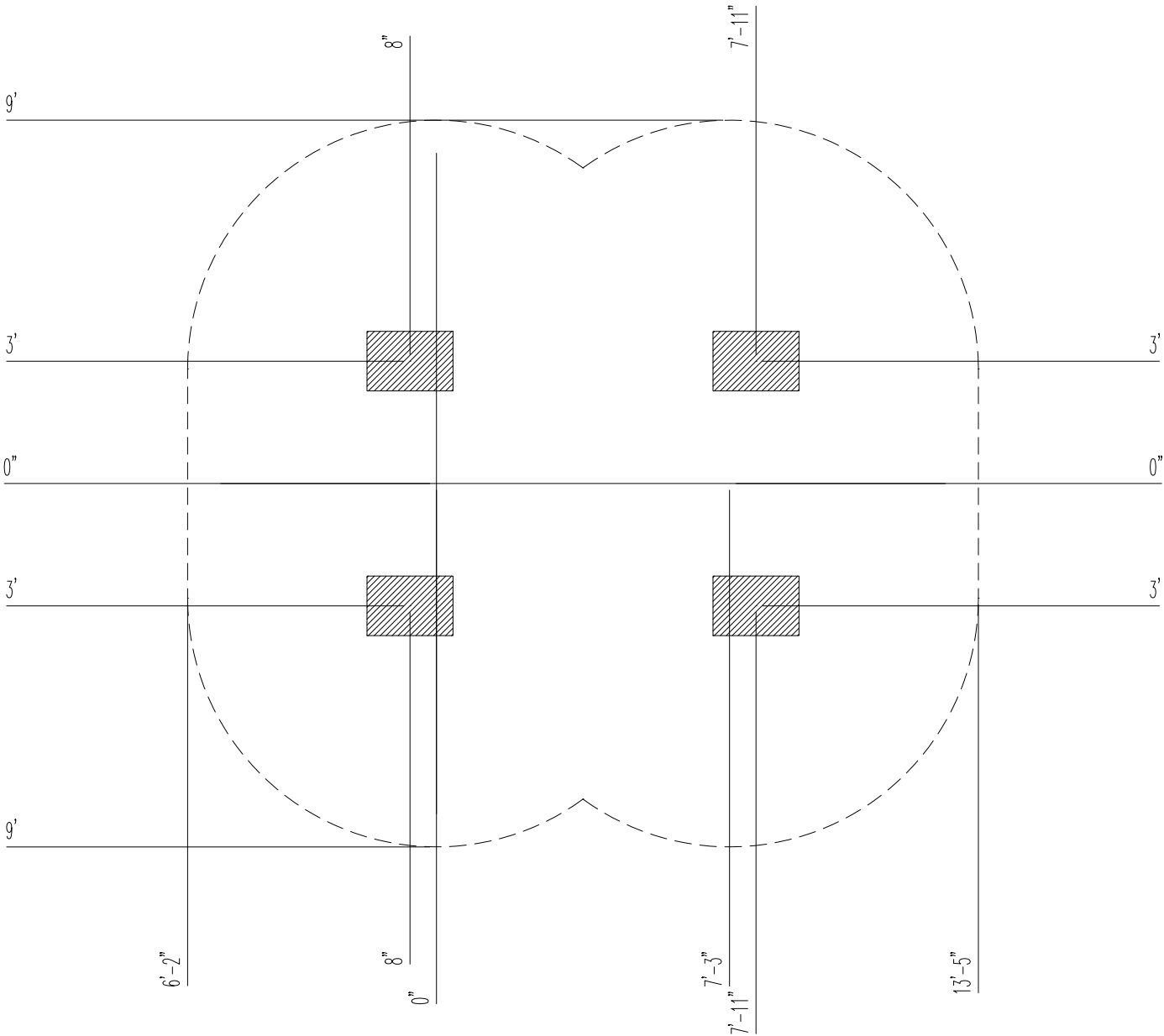
  = 

- Beton
- Beton
- Concrete
- Hormigón
- Béton
- Cemento
- Beton
- Betong

0 m³ 0 cu.ft.

Safety Zone

Perimeter: 66 ft
Area: 315,4 ft²



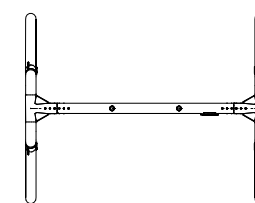


KSW921

ID ----

JIRPET

2021-06-16



Scale: 1:50

Foundation: 90 cm

All Unspecified Holes

=

16A

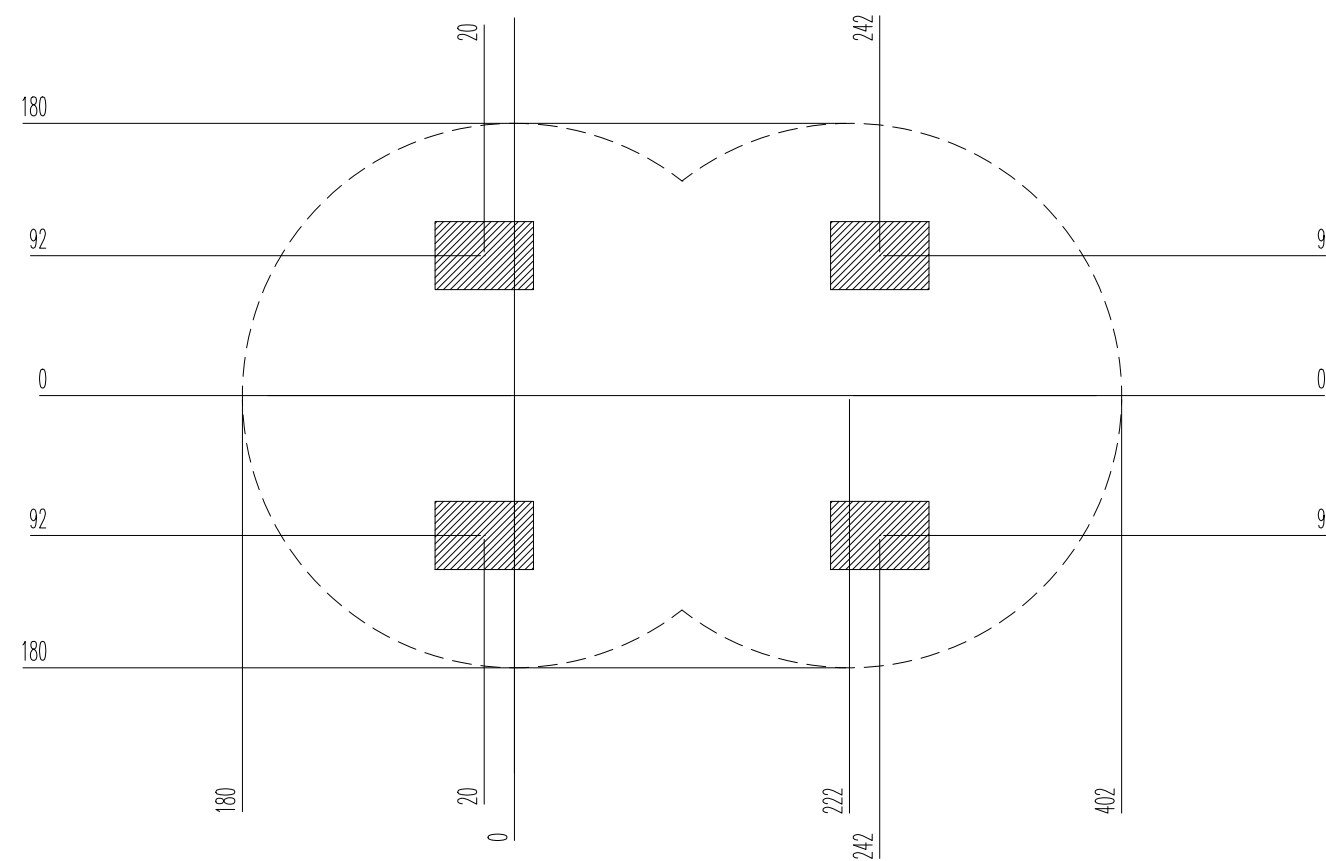
- Beton
- Beton
- Concrete
- Hormigón
- Béton
- Cemento
- Beton
- Betong

0 m³ 0 cu.ft.

Safety Zone

Perimeter: 17 m

Area: 17,7 m²



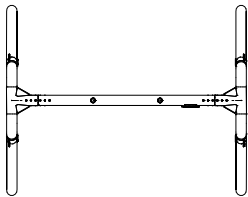


KSW921

ID ----

JIRPET




2021-06-16



Scale: 1:50

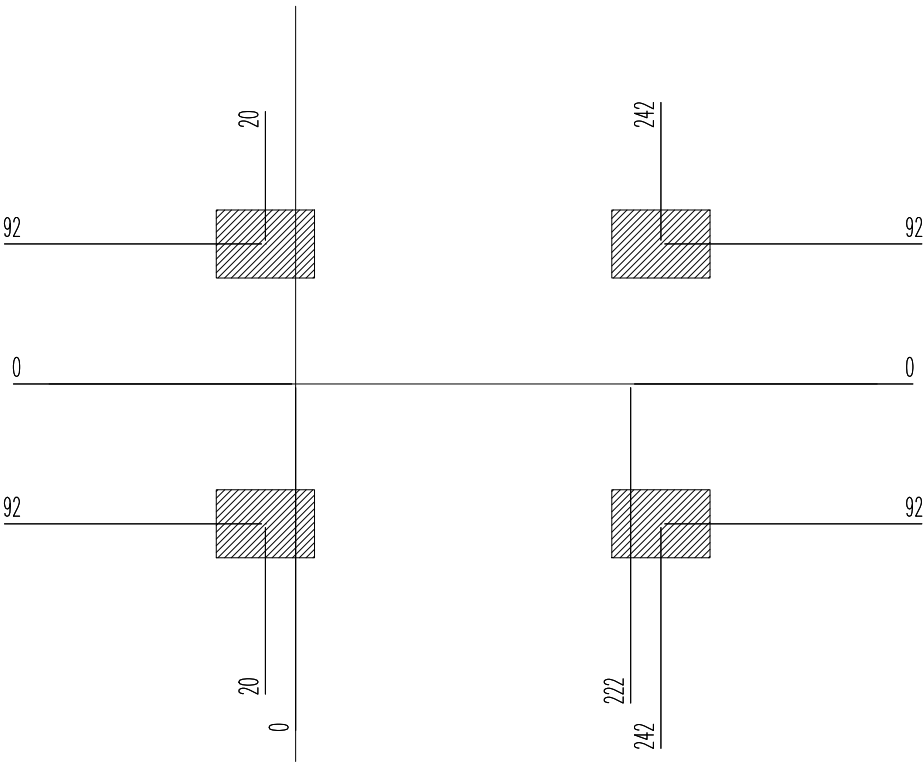
Foundation: 90 cm

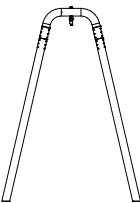
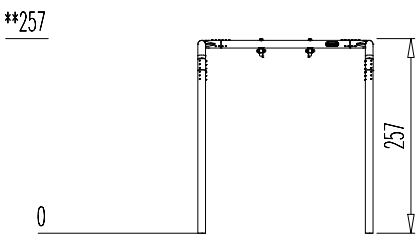
All Unspecified Holes

  = 

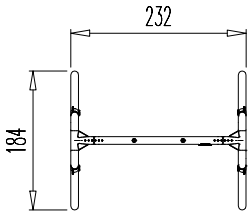
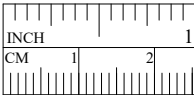
Beton
Betón
Concrete
Hormigón
Béton
Cemento
Betón
Betong

0 m³ 0 cu.ft.





Scale: 1:100



ASTM

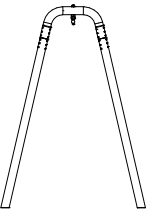
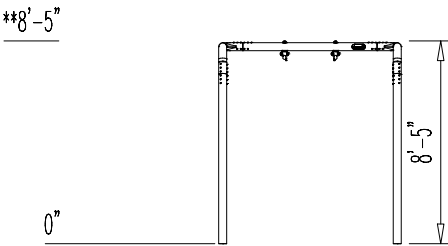


KSW921

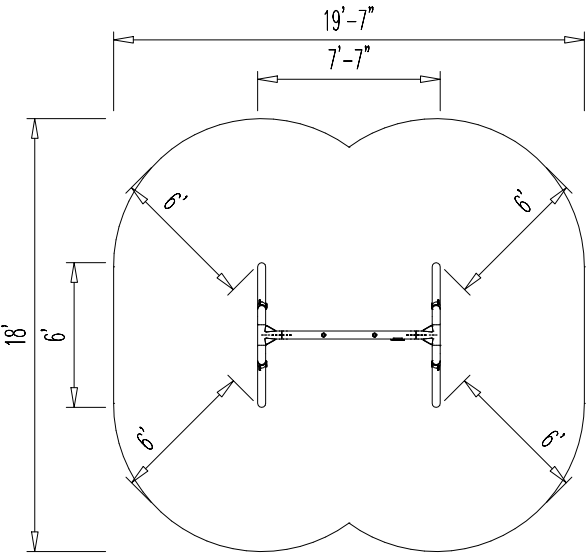
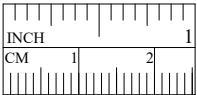
ID ----

JIRPET

2021-06-16



Scale: 1/8" = 1'-0"



CSA Z614

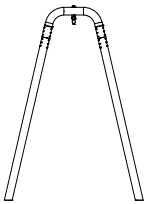
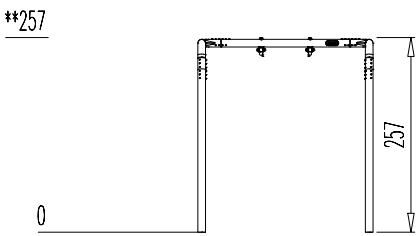


KSW921

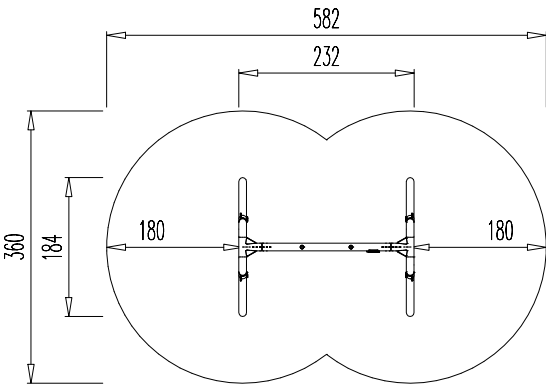
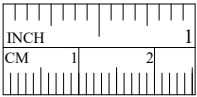
ID ----

JIRPET

2021-06-16



Scale: 1:100



AS4685

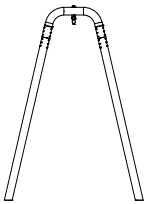
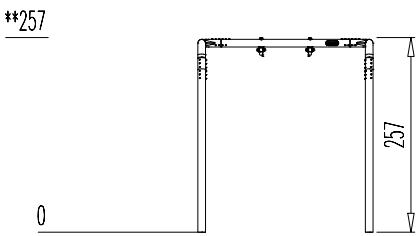


KSW921

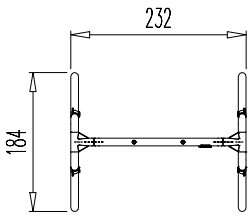
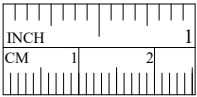
ID ----

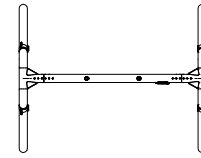
JIRPET

2021-06-16



Scale: 1:100





SW903-00



2x SW952006-05

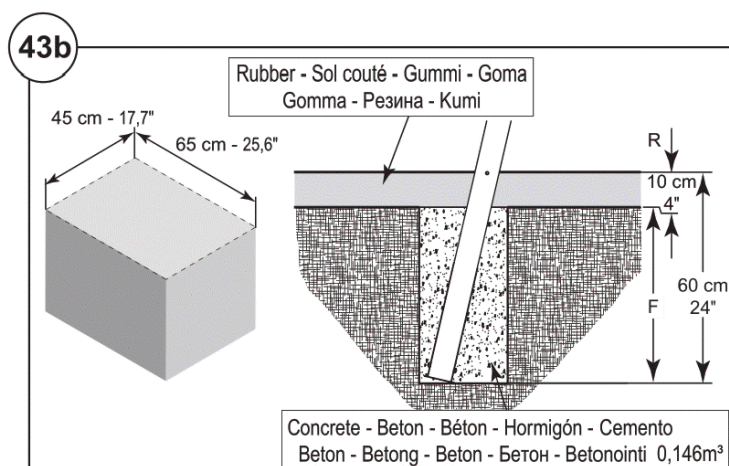
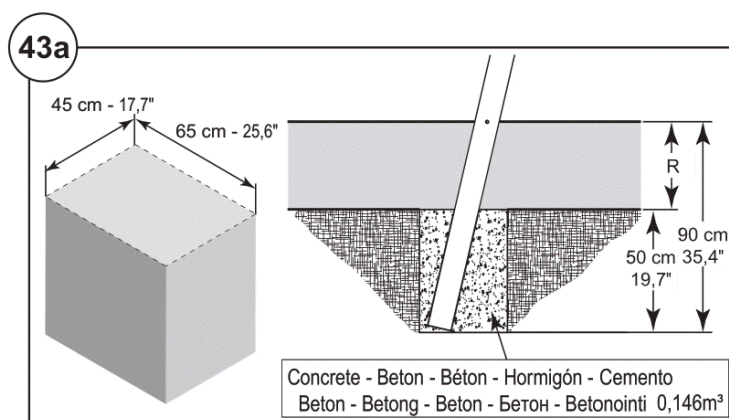
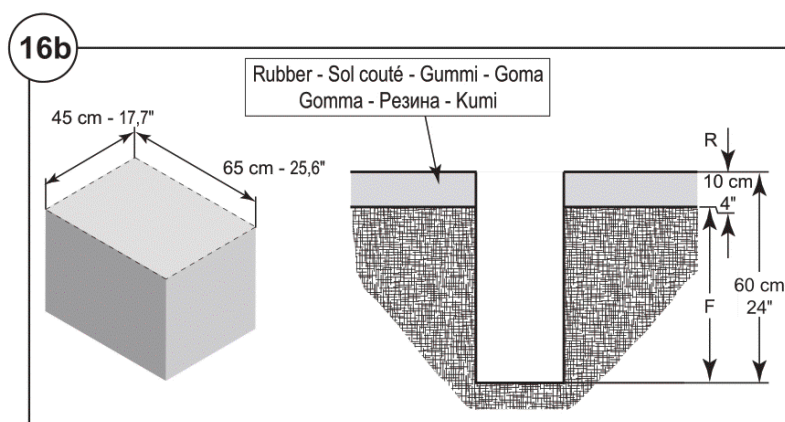
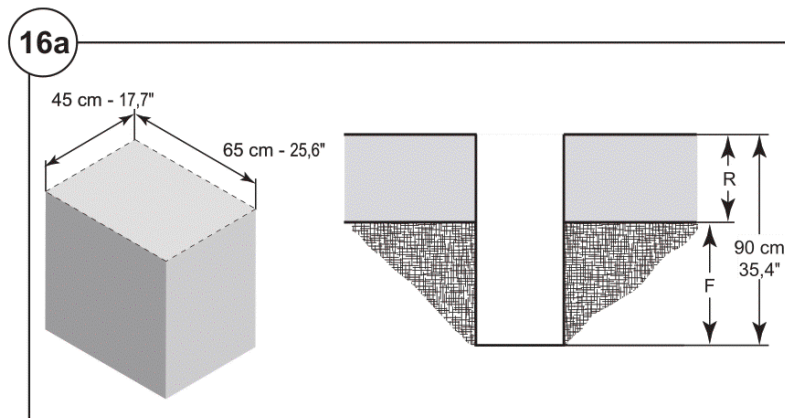


SW951032-01



SW950001-02

V00113 Portal swings



Important! The concrete must be sufficiently hardened before the play item may be used.

Wichtig! Vor der Inbetriebnahme des Spielräräts muß der Beton ausreichend abge bunden haben.

Important! Le béton doit avoir suffisamment durci avant de mettre en service l'équipement de jeux.

Importante! El hormigón debe estar suficientemente endurecido antes de comenzar a utilizar el equipo de juego.

Importante! Prima de utilizzare le attrezzature da gioco, il cemento deve essere sufficientemente solidificato.

Belangrijk! Het beton moet voldoende gehard zijn voordat het speeltoestel in gebruik wordt genomen.

Viktigt! Betongen måste ha härdat tillräckligt innan lekredskapet börjar användas.

Viktigt! Betonen skal være tilstrækkeligt hær det, før legeredskabet tages i brug.

Важно! Перед использованием сооружений убедитесь, что бетон затвердел.

HUOM! Betonivalun on oltava tarpeeksi kuiva, ennen kuin leikkivälinettä saa käyttää.

R: Resilient surfacing - Fallschutzbela g - Revêtement amortissant
Recubrimiento amortiguador - Materiale ammortizzante
Veiligheidsondergrond - Fallunderlag - Faldunderlag
Безопасное покрытие - Turva-alusta

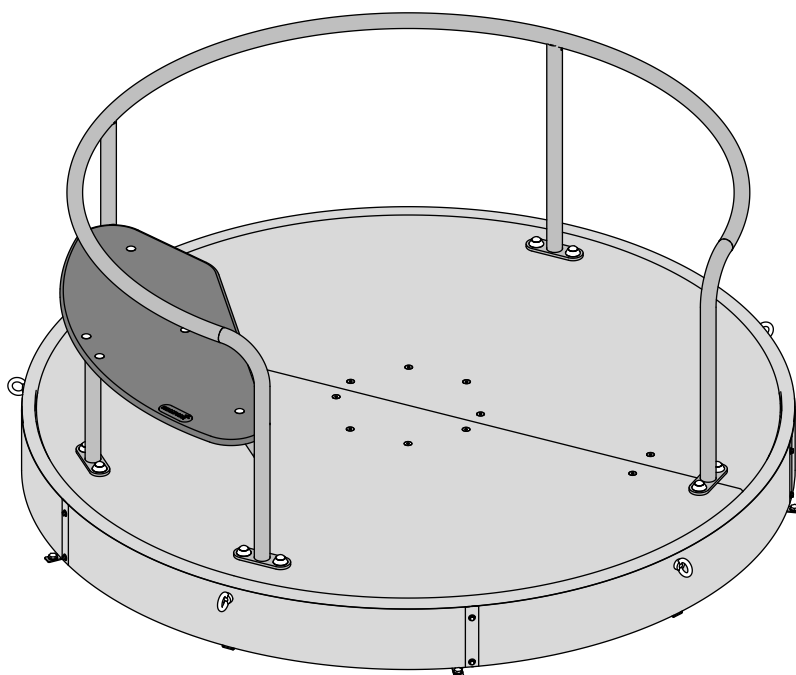
F: Foundation - Fundament - Fondement - Fondazione
Fundamento - Fonden - Stiftelsen - Perustus - Stichting - Фонд



PCM157-0201 PCM157-0204

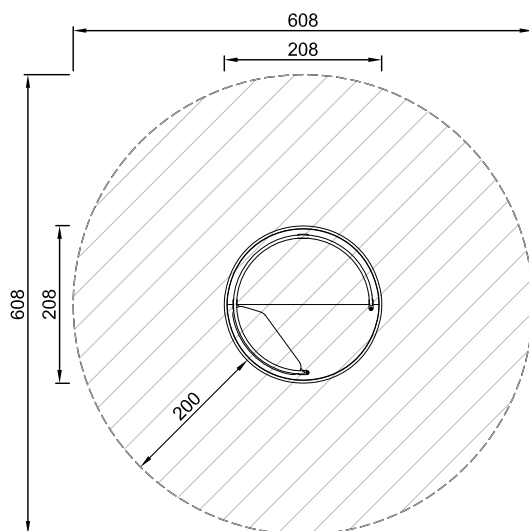
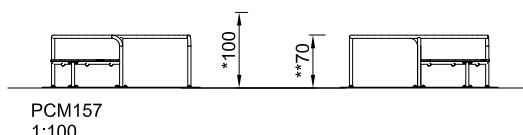
PCM157-0202 PCM157-0205

PCM157-0203 PCM157-0206





Safety zone in accordance with EN 1176
Sicherheitsabstand gemäß EN 1176
Espace d'évolution selon EN 1176
Zona de seguridad según EN 1176
Área de segurança de acordo com a EN1176
Distanze di sicurezza in conformità con lo standard EN 1176
Veiligheidsgebied in overeenstemming met EN 1176
Säkerhetsområde enl EN 1176
Sikkerhedsareal iht. EN 1176
Зона безопасности в соответствии с EN 1176
EN1176-normin mukainen turva-alue



PCM157
*100cm
**70cm
***29m²
1:100

* Free height of fall
Freie Fallhöhe
Hauteur de chute libre
Altura de caída libre
Altura de queda livre
Altezza di caduta libera
Vrije valhoogte
Fri fallhöjd
Fri faldhøjde
Высота свободного падения
Vapaa putoamiskorkeus

All measurements are in cm
Alle Maßangaben in cm
Toutes les dimensions sont indiquées en cm
Todas las medidas están indicadas en cm
Todas as medidas estão em cm
Tutte le misure sono in cm
Alle afmetingen zijn in cm
Alla mått är angivna i cm
Alle mål er angivet i cm
Все измерения в см.
Kaikki ohjeissa mainitut mitat ovat senttimetrejä.

Please note: The safety zone shown on this drawing is in accordance with EN 1176. There may be some locations where a larger safety zone is required. If in doubt, please contact your play consultant.

Achtung: Der angegebene Sicherheitsabstand entspricht EN 1176. Bestimmte Länder schreiben größere Sicherheitsabstände vor. Bitte wenden Sie sich in Zweifelsfällen an Ihren Berater.

Attention : l'espace d'évolution montré est conforme à EN 1176. Dans certains pays, un espace d'évolution plus grand peut être exigé. Prière de contacter notre conseiller en cas de doute.

Observe: La zona de seguridad demostrada en este dibujo cumple con EN 1176. En algunos sitios puede ser necesaria una zona de seguridad más grande. En caso de tener alguna duda, por favor póngase en contacto con nuestro consultor.

Nota: A área de segurança ilustrada neste desenho está de acordo com a EN1176. Podem existir alguns territórios onde seja exigida uma área de segurança maior. Na dúvida, por favor contacte o seu consultor local da KOMPAN.

Attenzione: la distanza di sicurezza specificata è conforme ai requisiti EN 1176. In alcuni paesi, le norme locali possono richiedere distanze di sicurezza maggiori. In caso di dubbi, contattare il nostro consulente.

N.B.: het getoonde veiligheidsgebied is in overeenstemming met EN 1176. In sommige landen kan een groter veiligheidsgebied vereist zijn. In geval van twijfel onze adviseur raadplegen.

Obs: Det markerade säkerhetsområdet följer EN 1176. I vissa länder kan det finnas krav på större säkerhetsområde. Kontakta vänligen vår konsulent om du är osäker.

Obs.: Det viste sikkerhedsareal er i overensstemmelse med EN 1176. I nogle lande kan der være krav om større sikkerhedsareal. Kontakt venligst vores konsulent ved tvivlsspørgsmål.

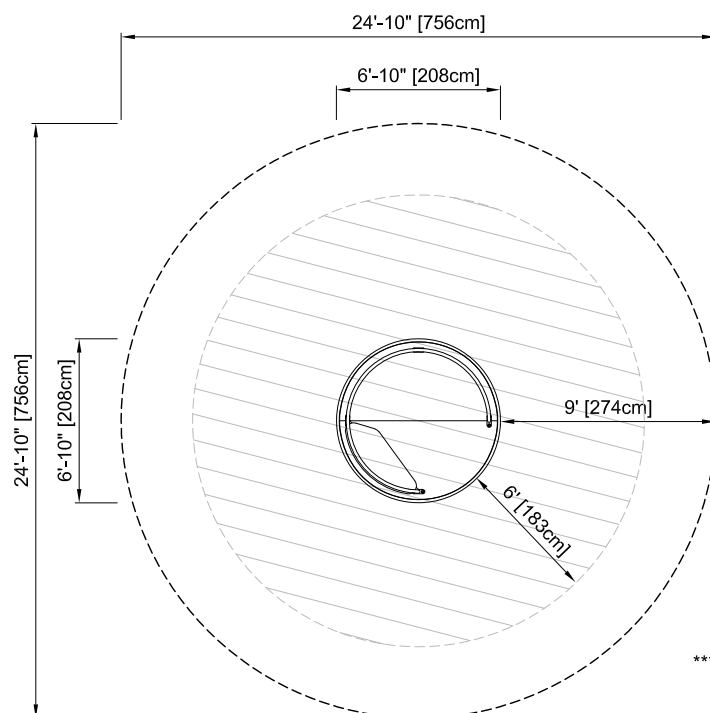
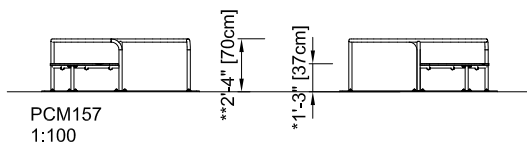
Внимание: Зона безопасности указана в соответствии с EN 1176. Возможны случаи, когда требуется увеличение зоны безопасности. В затруднительных случаях обращайтесь к Вашему консультанту.

Huom: Tämän piirustuksen turva-alue on EN1176-normin mukainen. Joissain sijoituspaikoissa saatetaan edellyttää suurempaa turva-aluetta. Jos olet epävarma, otathan yhteyttä KOMPANIin.

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Safety zone in accordance with ASTM 1487/CSA Z614
Sicherheitsabstand gemäß ASTM 1487/CSA Z614
Espace d'évolution selon ASTM 1487/CSA Z614
Zona de seguridad según ASTM 1487/CSA Z614
Distanze di sicurezza in conformità con lo standard ASTM 1487/CSA Z614
Veiligheidsgebied in overeenstemming met ASTM 1487/CSA Z614
Säkerhetsområde enl ASTM 1487/CSA Z614
Sikkerhedsareal iht. ASTM 1487/CSA Z614
Зона безопасности в соответствии с ASTM 1487/CSA Z614
ASTM 1487/CSA Z614-normin mukainen turva-alue



* Free height of fall
Freie Fallhöhe
Hauteur de chute libre
Altura de caída libre
Altezza di caduta libera
Vrije valhoogte
Fri fallhöjd
Fri faldhøjde
Высота свободного падения
Vapaa putoamiskorkeus

Please note: The safety zone shown on this drawing is in accordance with ASTM 1487/CSA Z614. There may be some locations where a larger safety zone is required. If in doubt, please contact your play consultant.

Achtung: Der angegebene Sicherheitsabstand entspricht ASTM 1487/CSA Z614. Bestimmte Länder schreiben größere Sicherheitsabstände vor. Bitte wenden Sie sich in Zweifelsfällen an Ihren Berater.

Attention : l'espace d'évolution montré est conforme à ASTM 1487/CSA Z614. Dans certains pays, un espace d'évolution plus grand peut être exigé. Prière de contacter notre conseiller en cas de doute.

Observe: La zona de seguridad demostrada en este dibujo cumple con ASTM 1487/CSA Z614. En algunos sitios puede ser necesaria una zona de seguridad más grande. En caso de tener alguna duda, por favor póngase en contacto con nuestro consultor.

Attenzione: la distanza di sicurezza specificata è conforme ai requisiti ASTM 1487/CSA Z614. In alcuni paesi, le norme locali possono richiedere distanze di sicurezza maggiori. In caso di dubbi, contattare il nostro consulente.

N.B.: het getoonde veiligheidsgebied is in overeenstemming met ASTM 1487/CSA Z614. In sommige landen kan een groter veiligheidsgebied vereist zijn. In geval van twijfel onze adviseur raadplegen.

Obs: Det markerade säkerhetsområdet följer ASTM 1487/CSA Z614. I vissa länder kan det finnas krav på större säkerhetsområde. Kontakta vänligen vår konsulent om du är osäker.

Obs.: Det viste sikkerhedsareal er i overensstemmelse med ASTM 1487/CSA Z614. I nogle lande kan der være krav om større sikkerhedsareal. Kontakt venligst vores konsulent ved tvivlsspørgsmål.

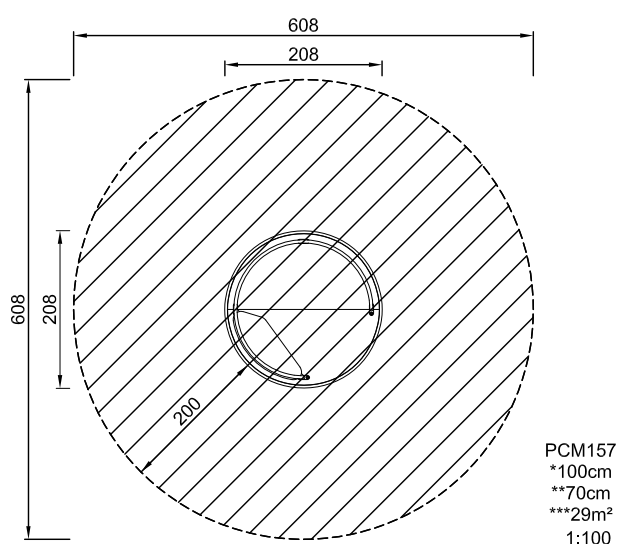
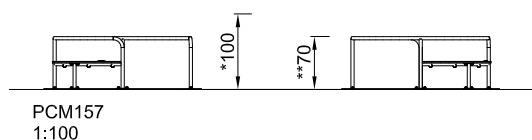
Внимание: Зона безопасности указана в соответствии с ASTM 1487/CSA Z614. Возможны случаи, когда требуется увеличение зоны безопасности. В затруднительных случаях обращайтесь к Вашему консультанту.

Huom: Tämän piirustuksen turva-alue on ASTM 1487/CSA Z614-normin mukainen. Joissain sijoituspaikoissa saatetaan edellyttää suurempaa turva-aluetta. Jos olet epävarma, otathan yhteyttä KOMPANIin.

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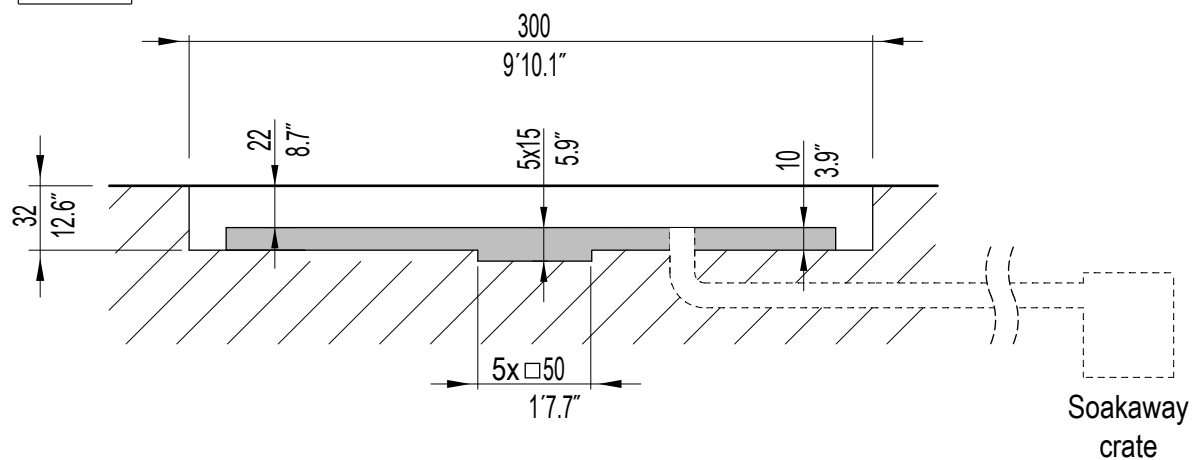
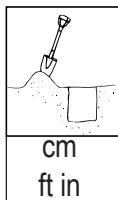
Safety zone in accordance with AS4685



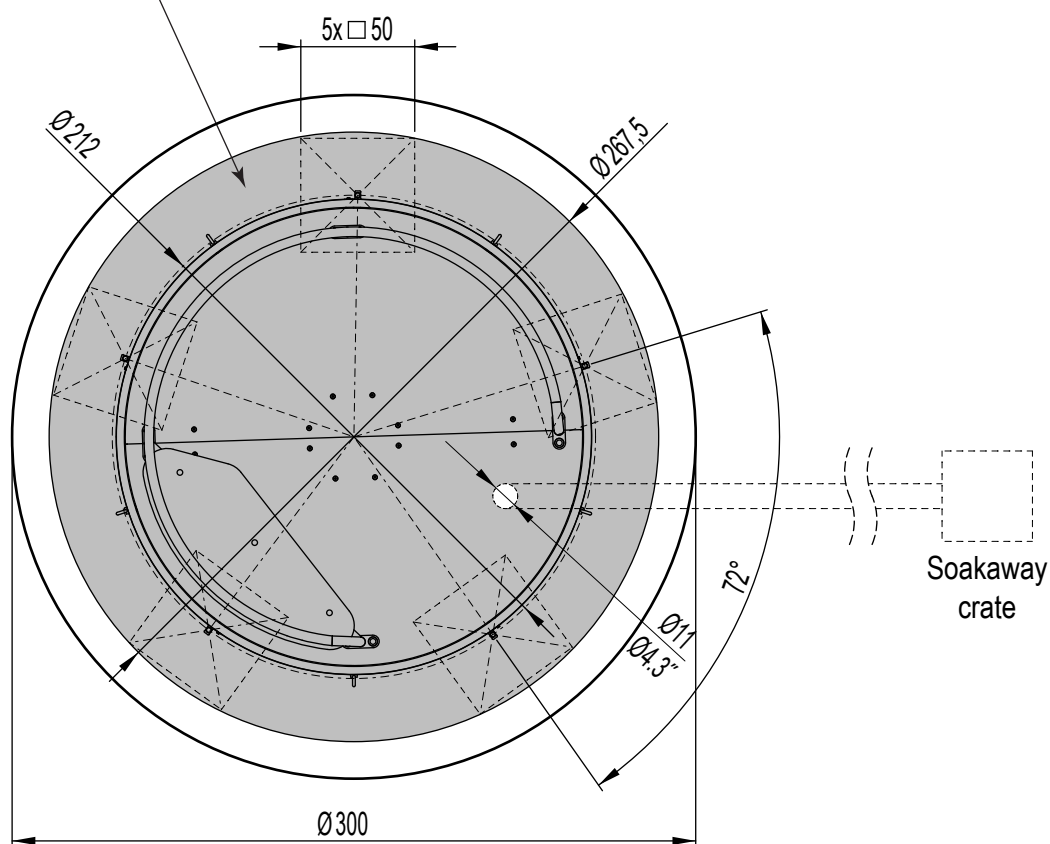
All measurements are in cm

*Free height of fall

Please note: The safety zone shown on this drawing is in accordance with AS4685. There may be some locations where a larger safety zone is required. If in doubt, please contact your play consultant.



Concrete 0,625 m³
Ø267,5 x 10cm/15cm
Ø8'9.3" x 3.9'/5.9"
Béton - Hormigón
Cemento - Beton
Betong - Beton
Бетон - Betonointi



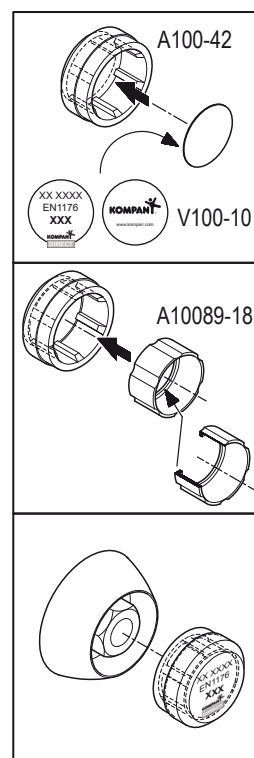
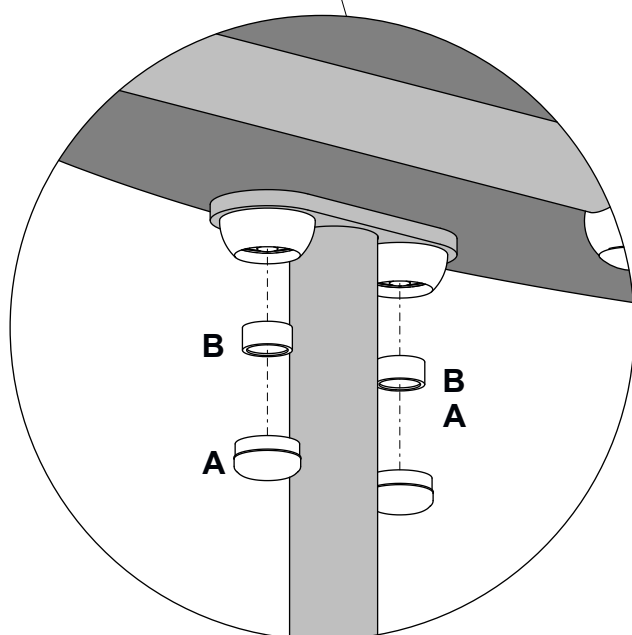
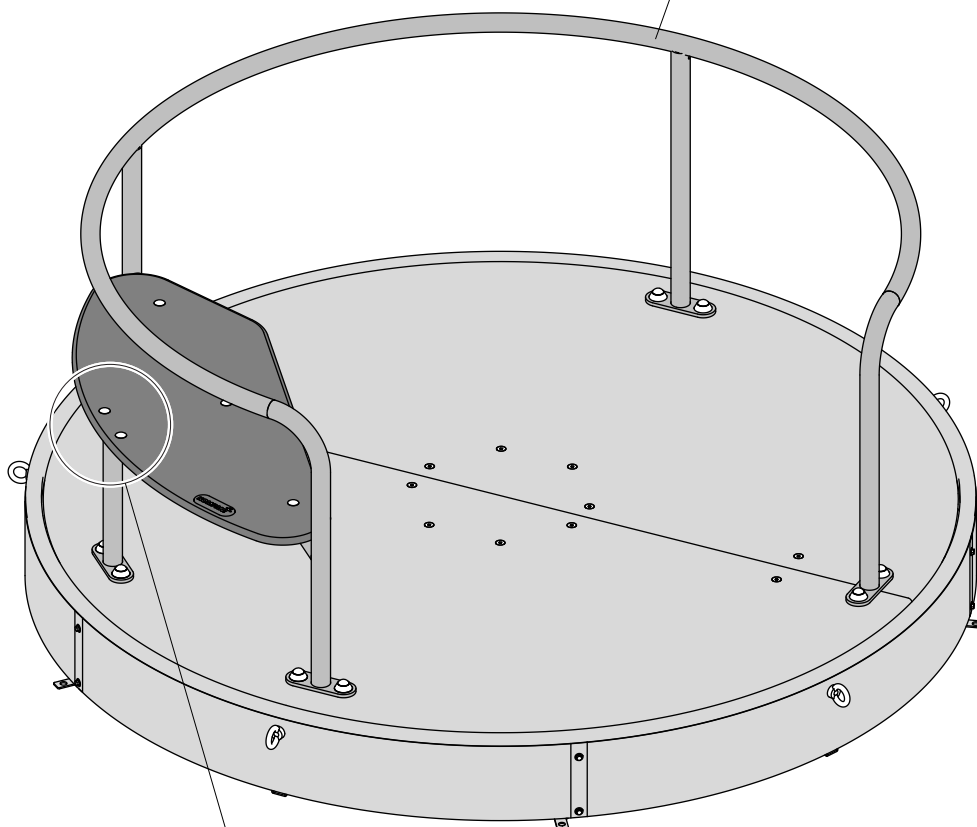
**A**

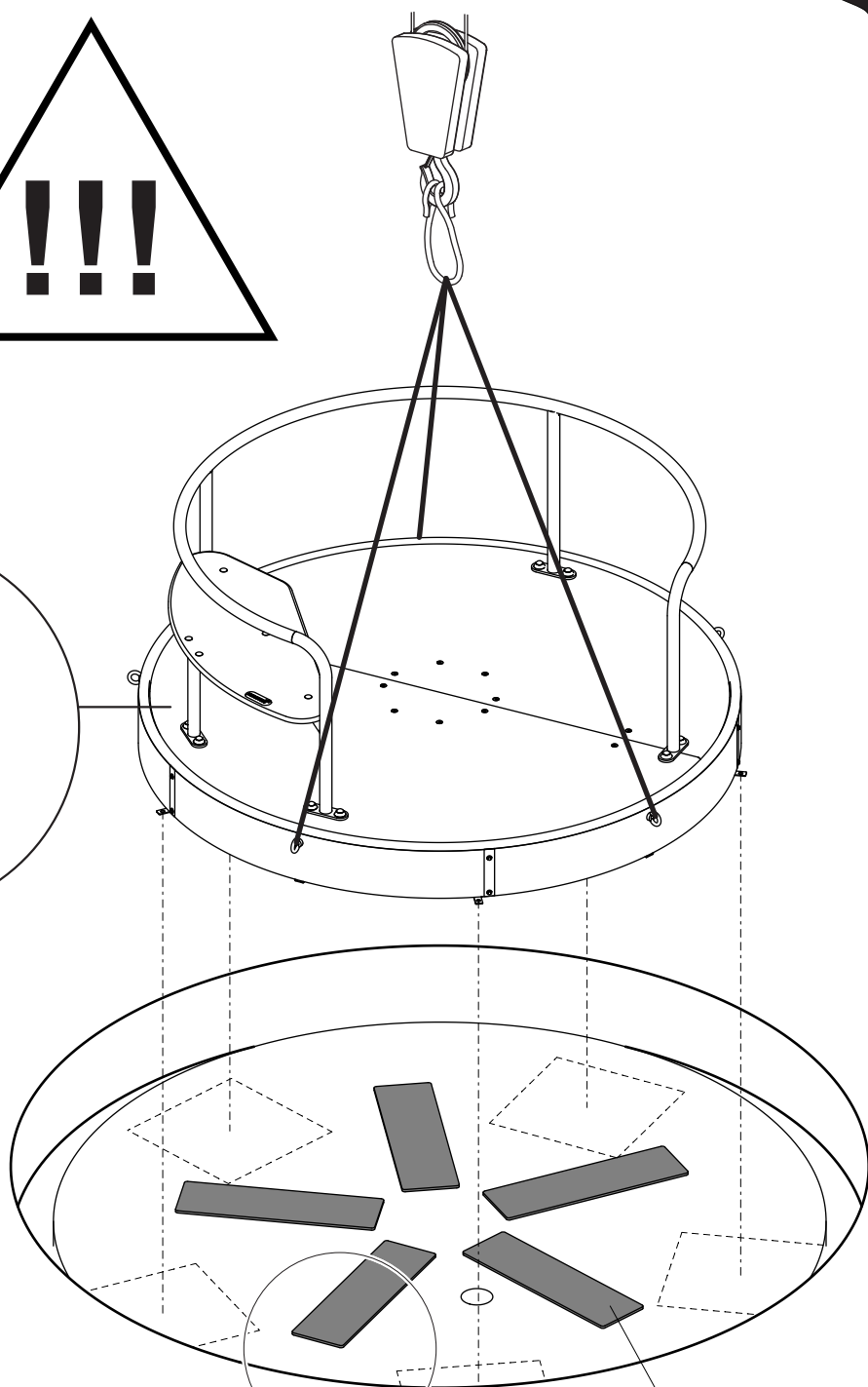
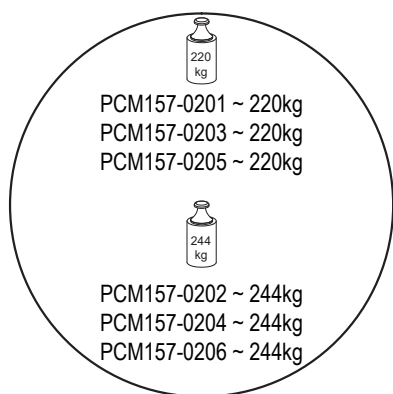
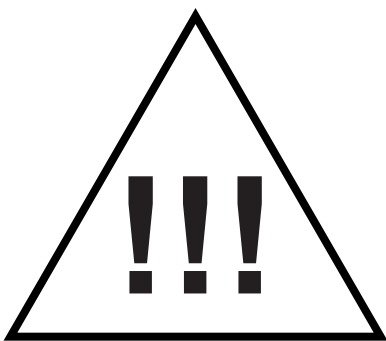
A100-42

B

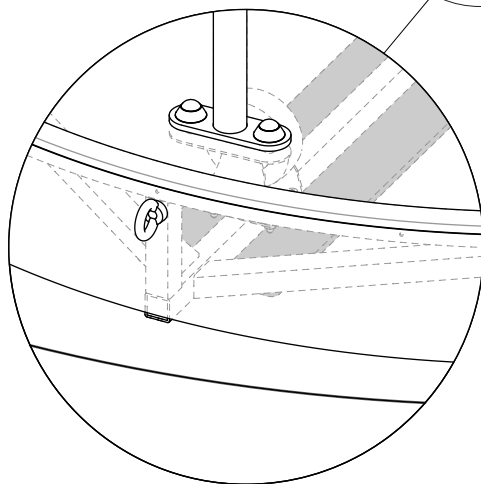
A10089-18

AC122222-11 - PCM157-0201
AC122223-11 - PCM157-0202
AC122222-213 - PCM157-0203
AC122223-213 - PCM157-0204
AC122222-303 - PCM157-0205
AC122223-303 - PCM157-0206

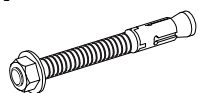




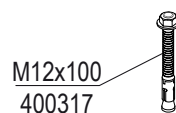
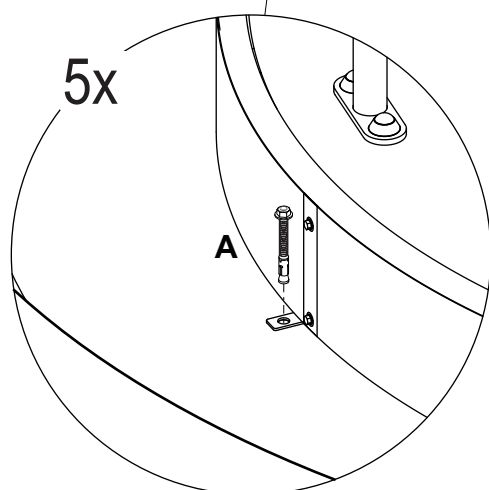
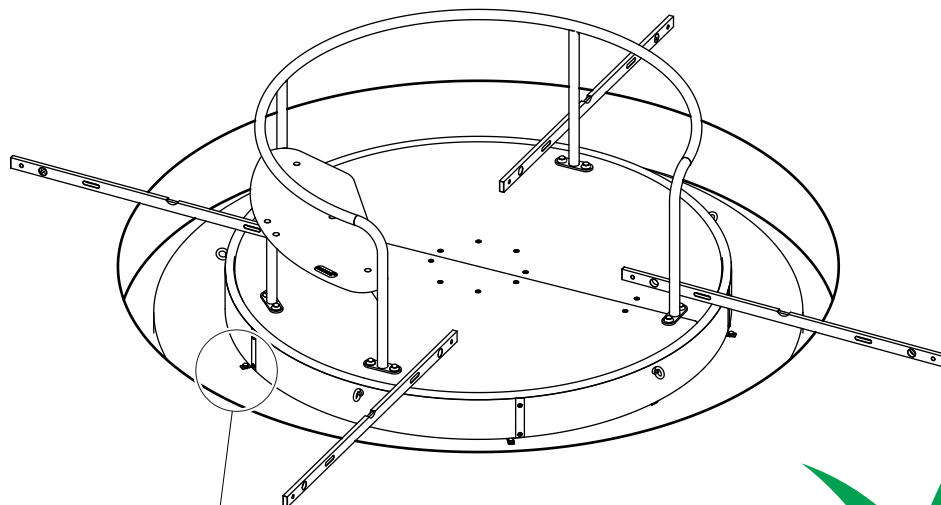
5x A122055-06



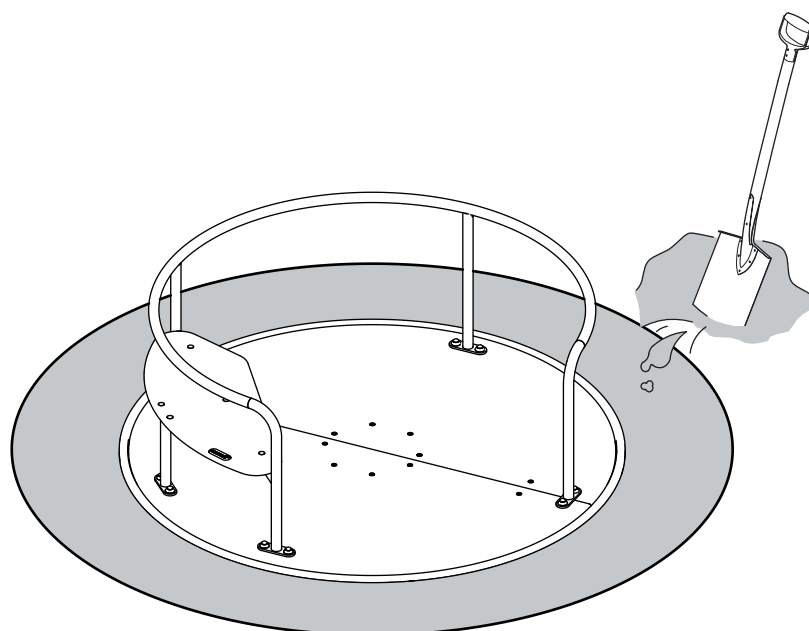
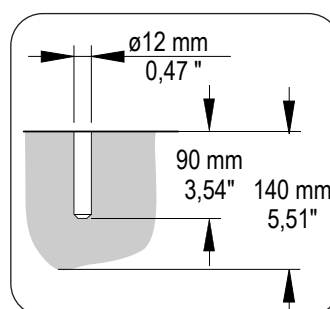
A

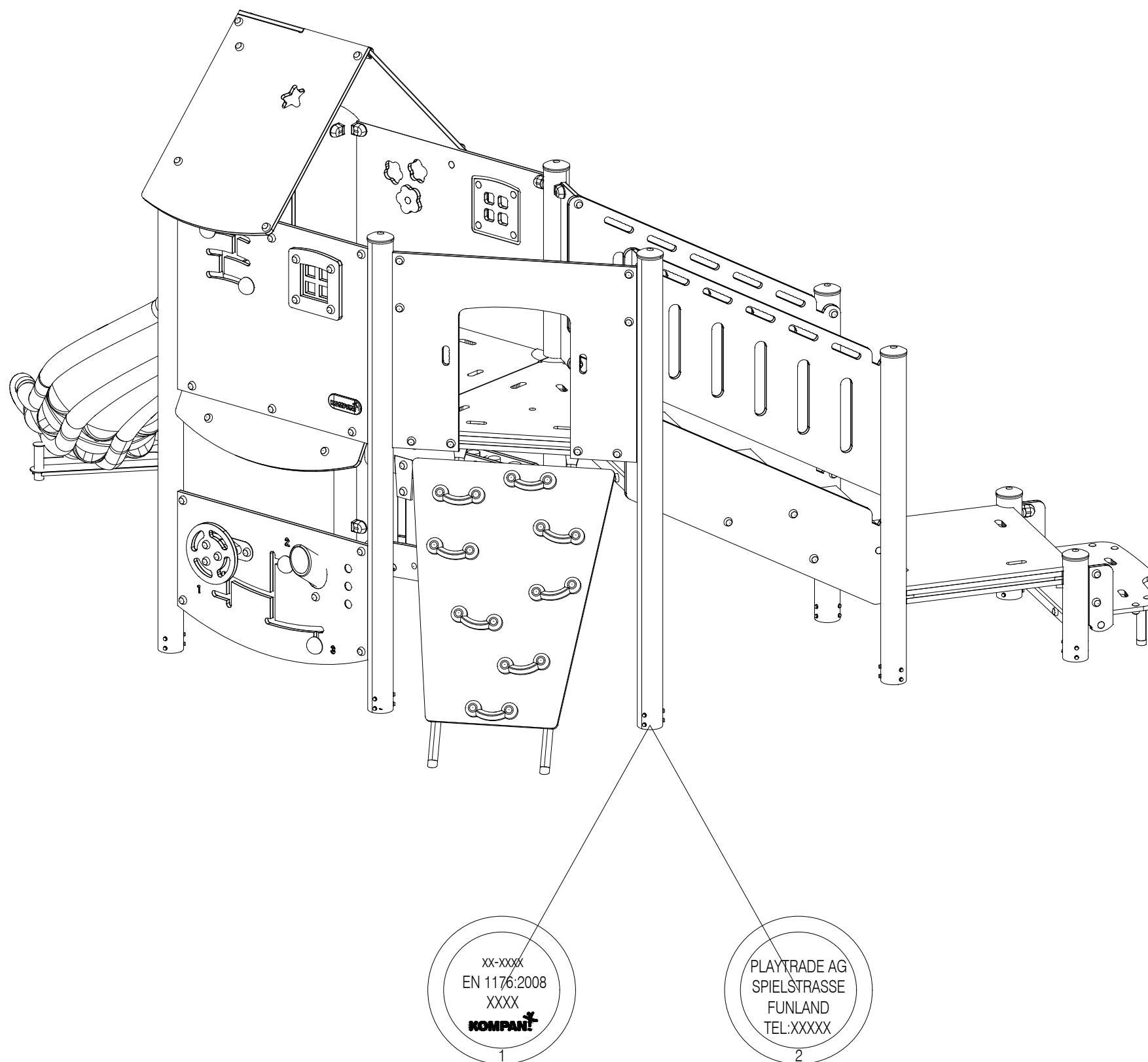


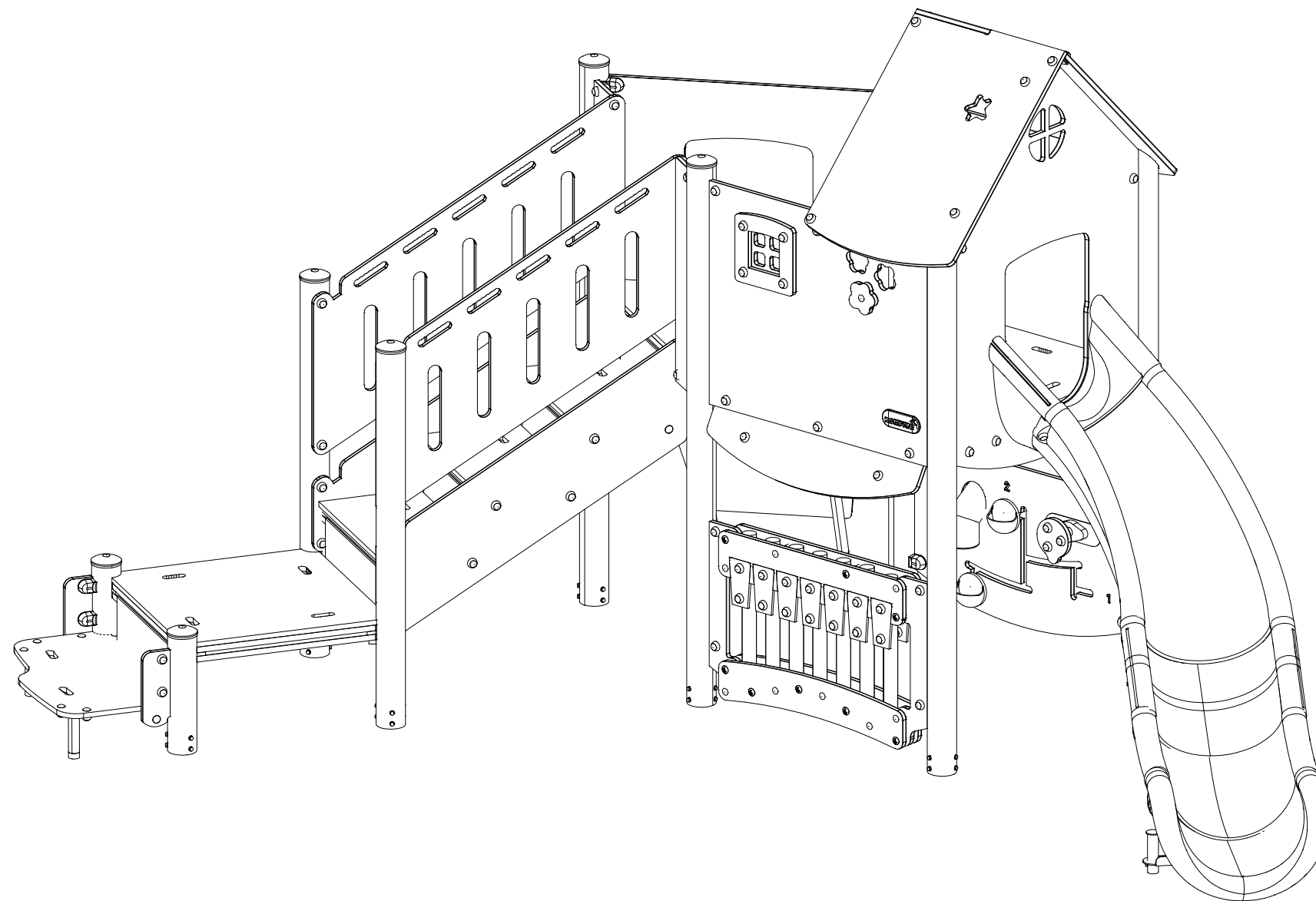
400317

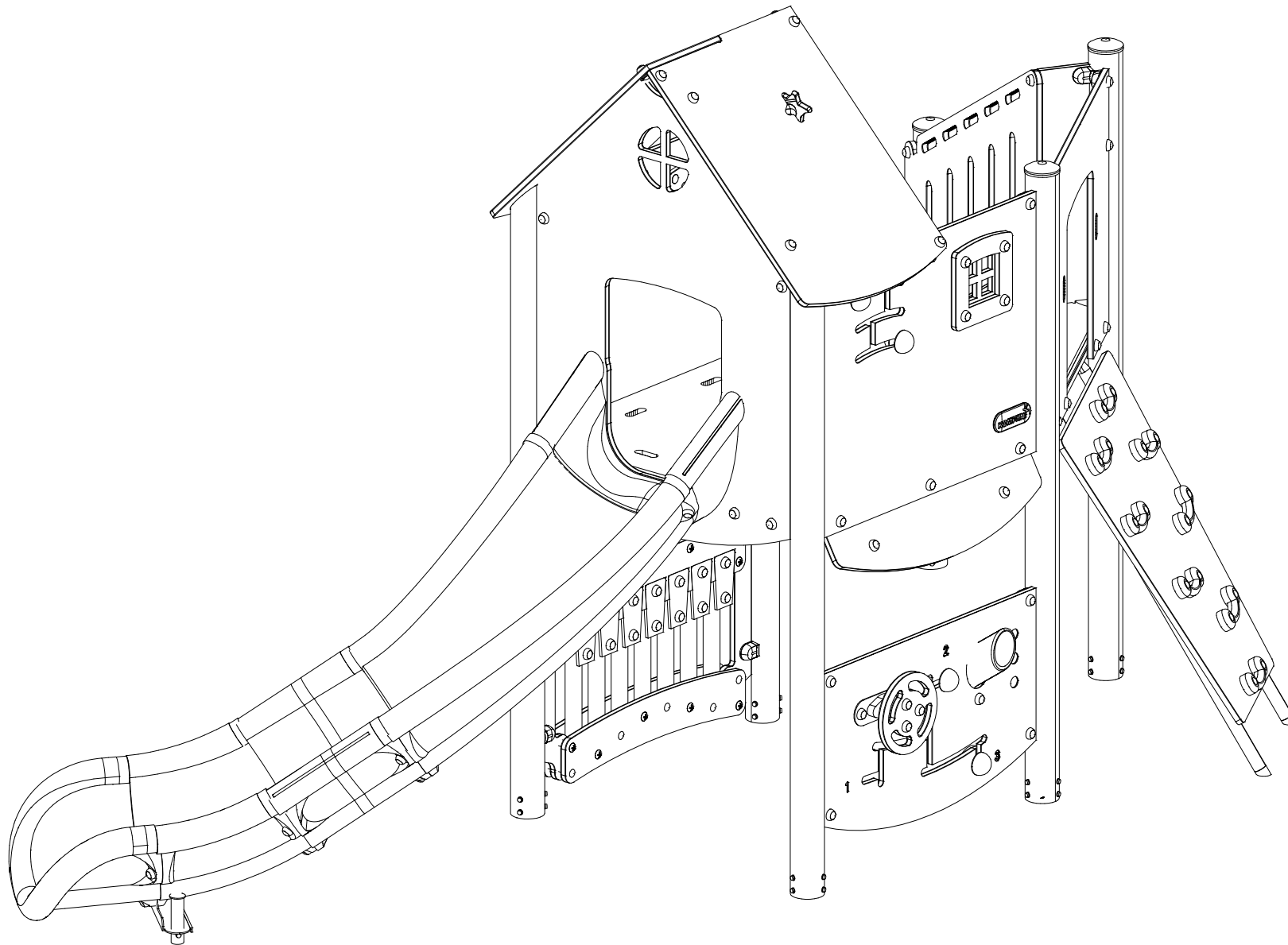


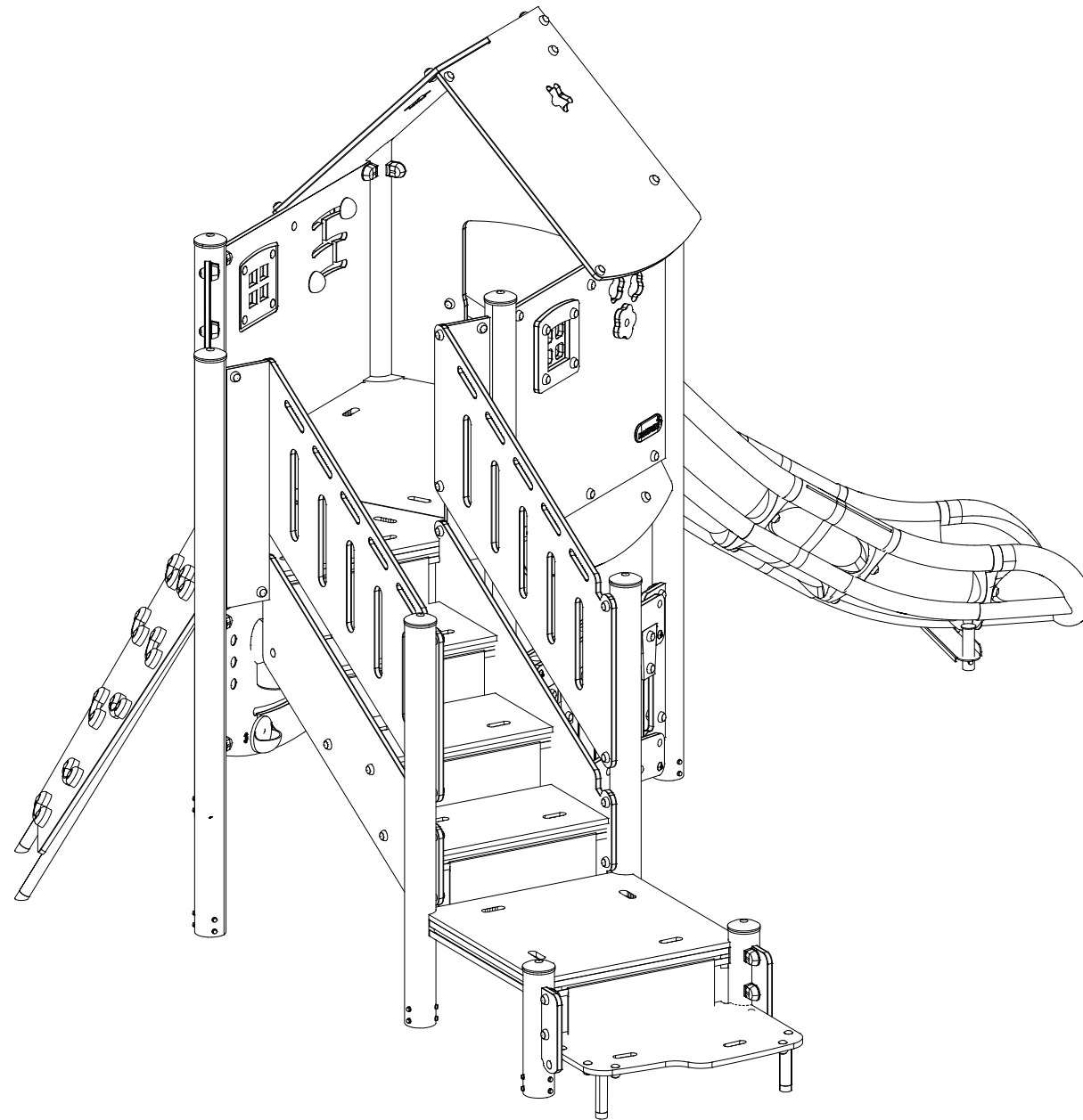
400317 - 12 mm:



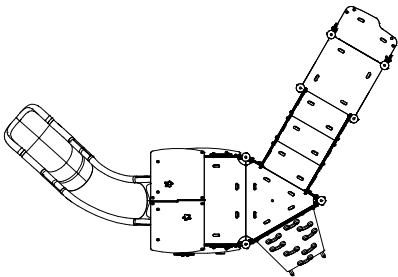











PCM103731
ID ----
TOMKAT
2021-09-27



Scale: 1/4" = 1'-0"

Foundation: 90 cm

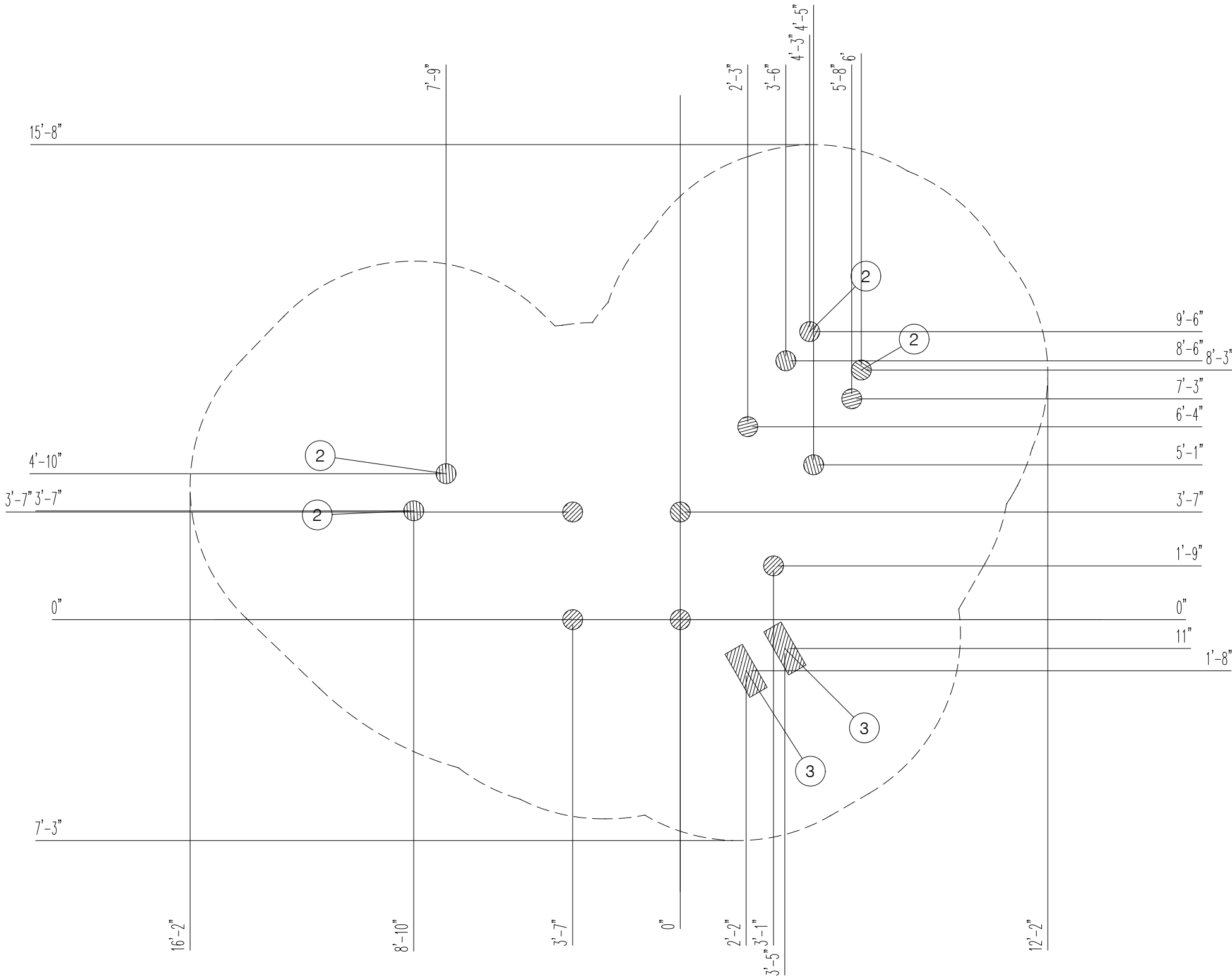
All Unspecified Holes

  = 

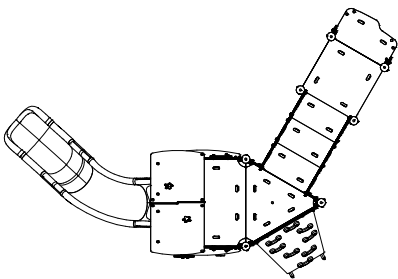
Beton
Beton
Concrete
Hormigón
Béton
Cemento
Beton
Betong

0 m³ 0 cu.ft.

Safety Zone
Perimeter: 84 ft
Area: 454,7 ft²






PCM103731
ID ----
TOMKAT
2021-09-27



Scale: 1:50

Foundation: 90 cm

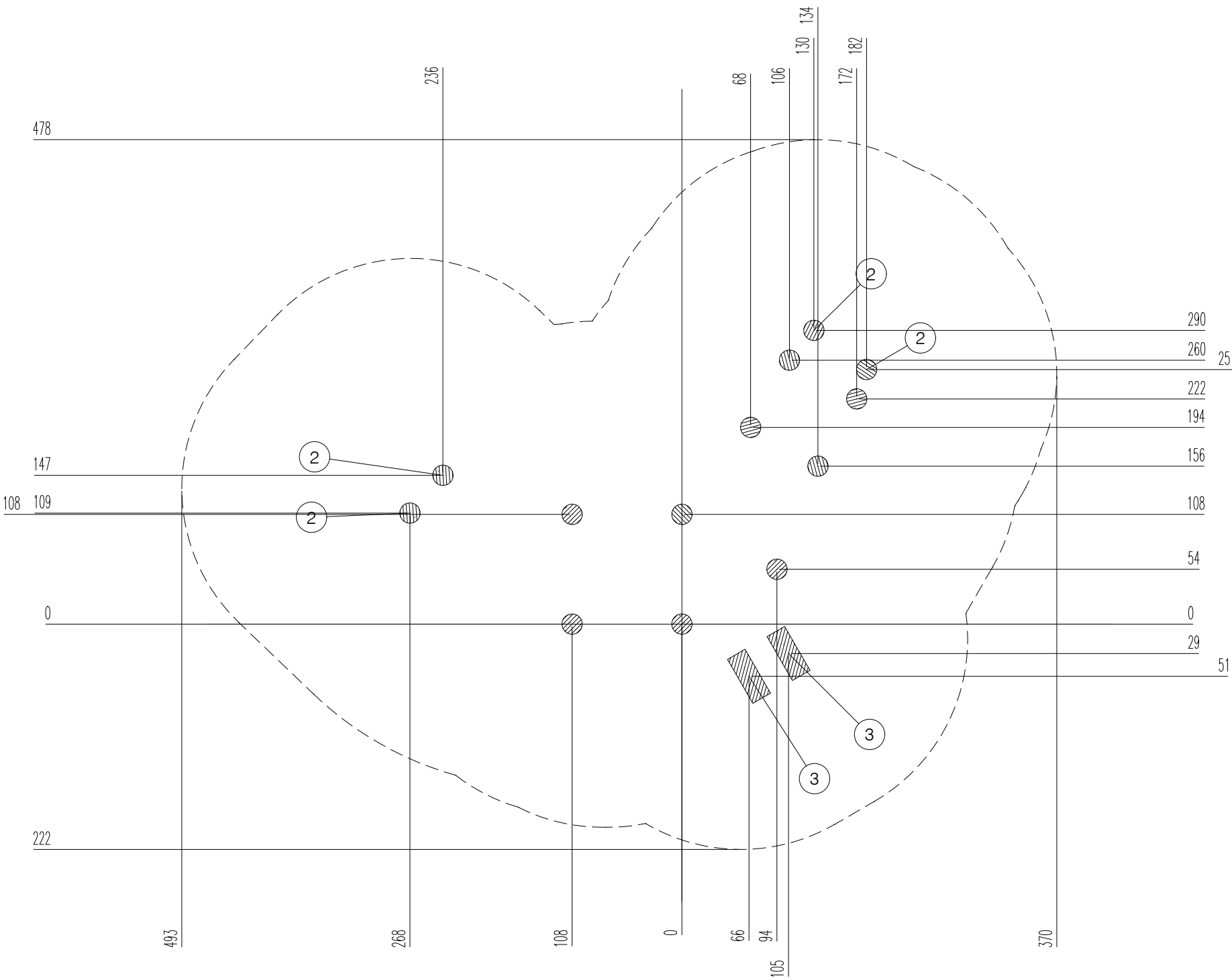
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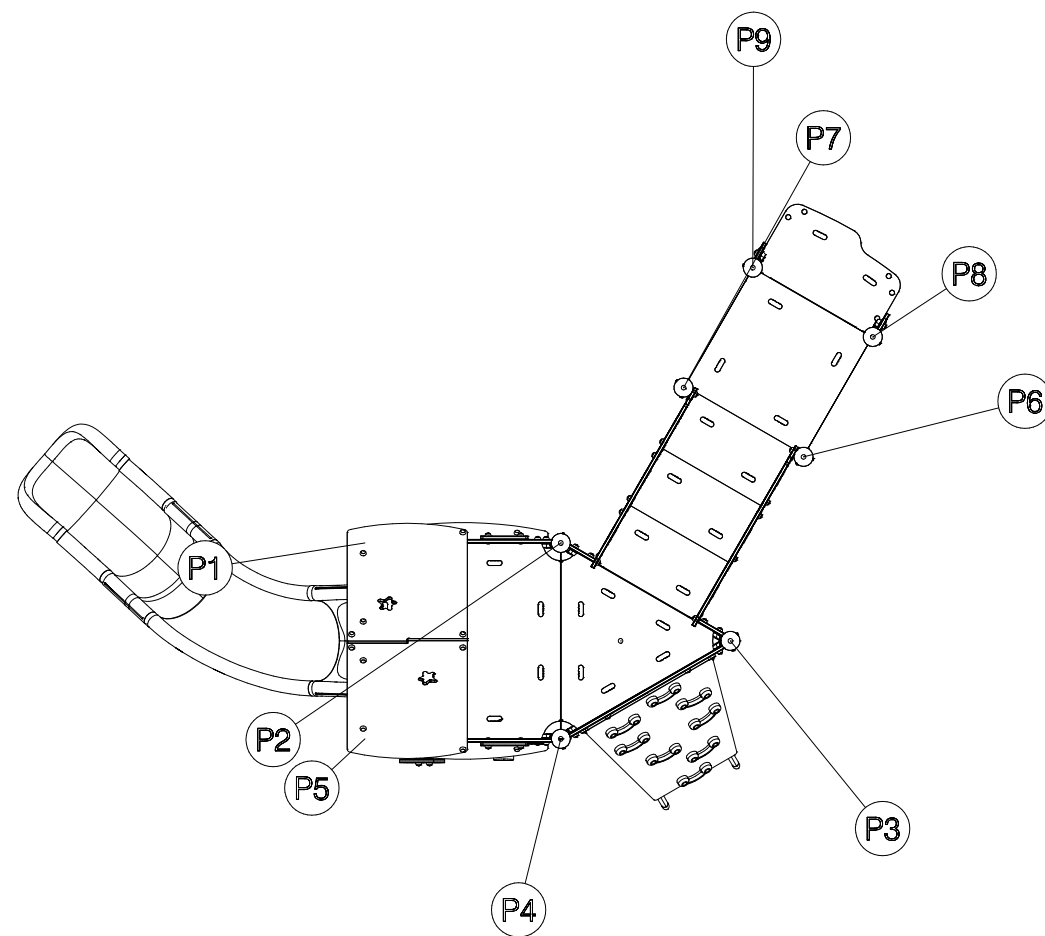
  = 

Beton
Beton
Concrete
Hormigón
Béton
Cemento
Beton
Betong

0 m³ 0 cu.ft.

Safety Zone
Perimeter: 26 m
Area: 42,3 m²

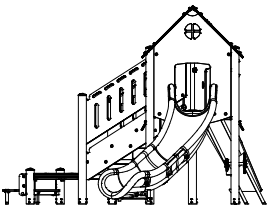
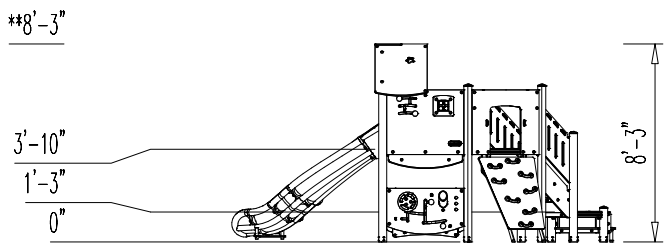




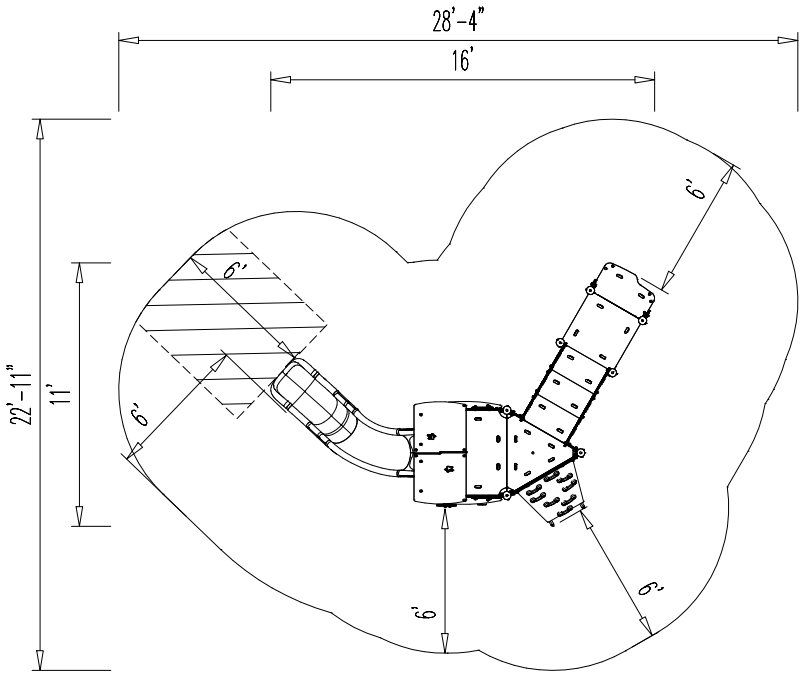
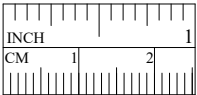
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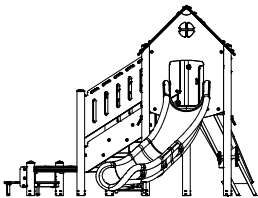
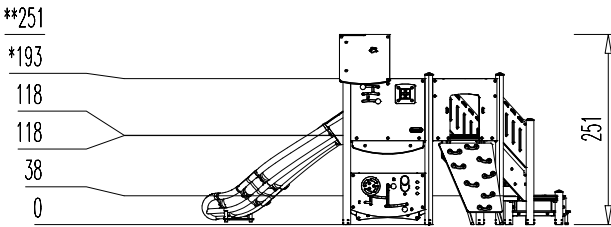


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TOMKAT
2021-09-27

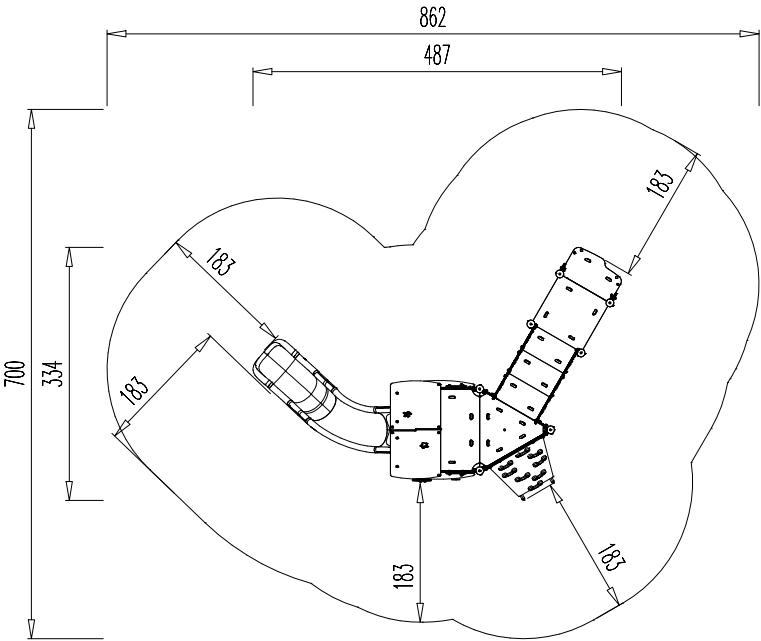
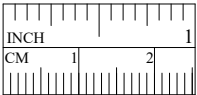


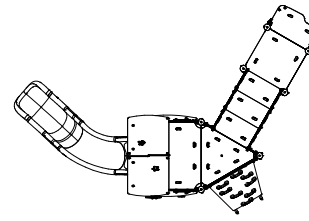
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Scale: 1:100





TOWER-A

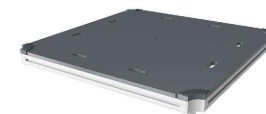
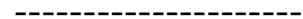
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A1-CP302200

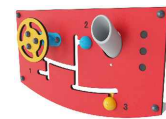
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A3-CP422600

CP100200-08



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A1B-CP110100-05

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A2-CP402100

A4-CP810800



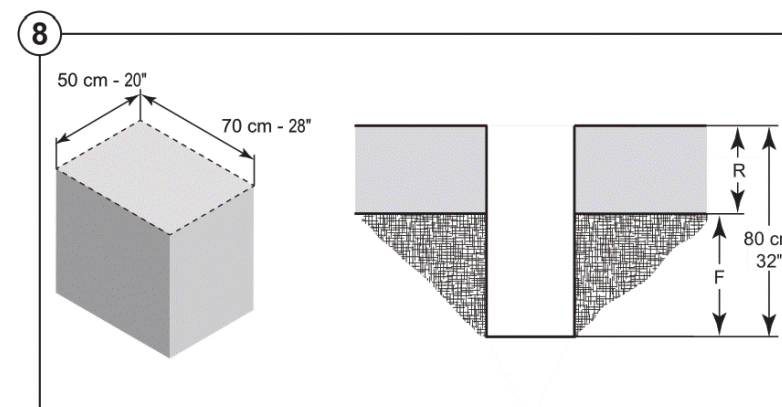
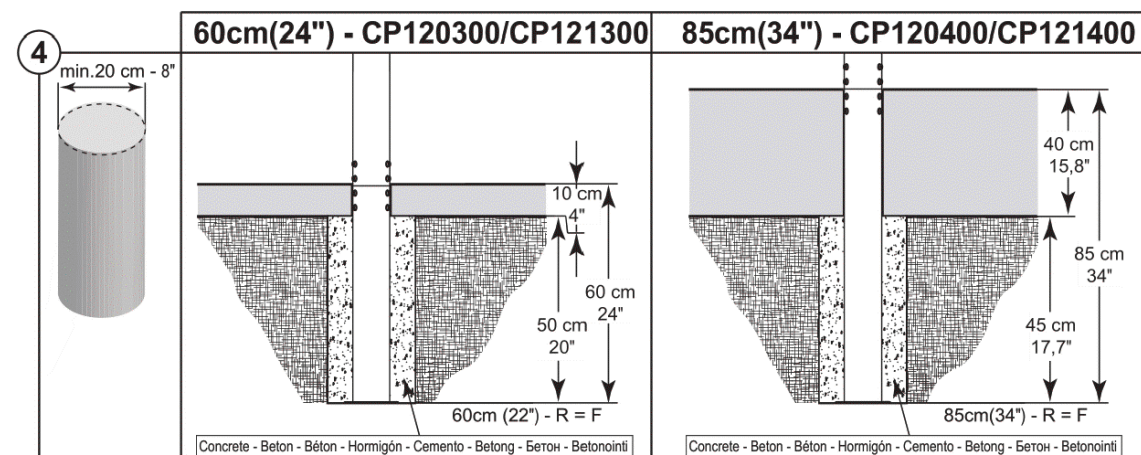
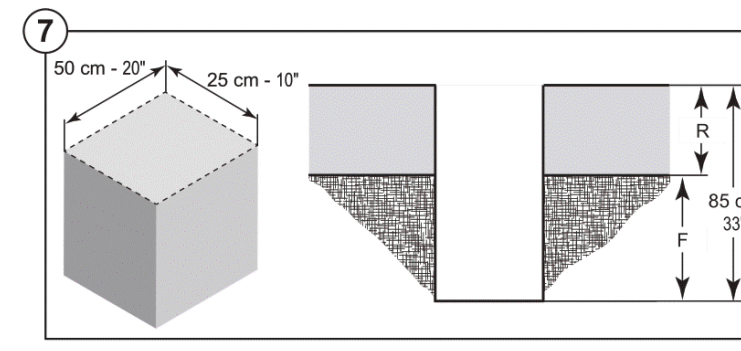
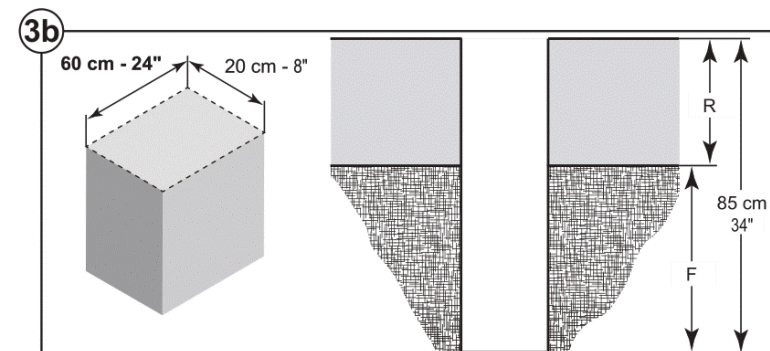
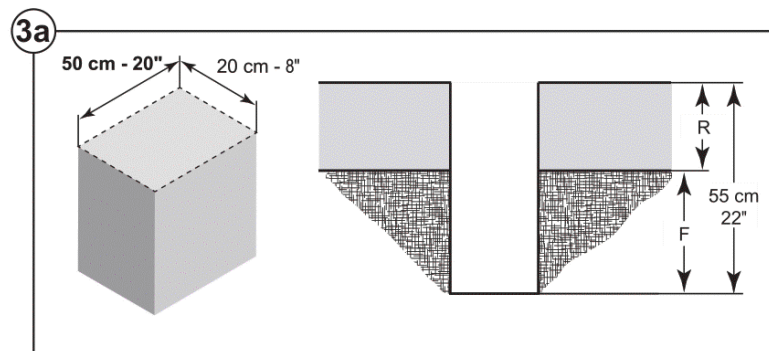
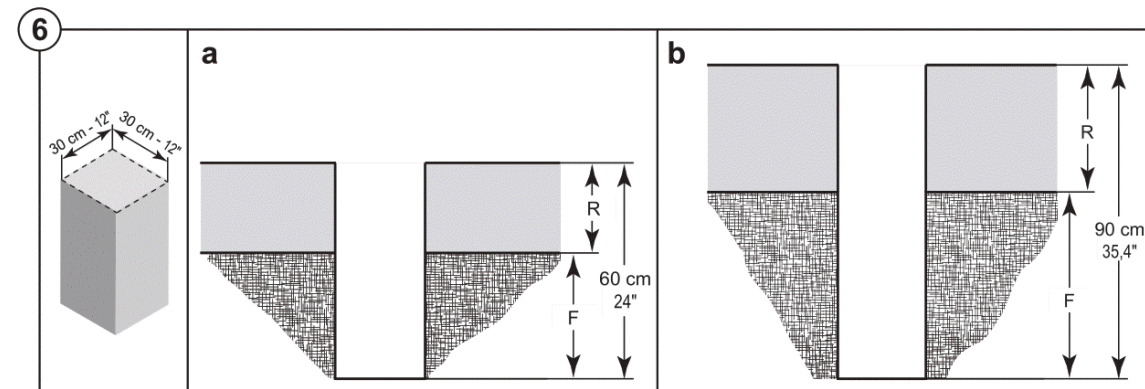
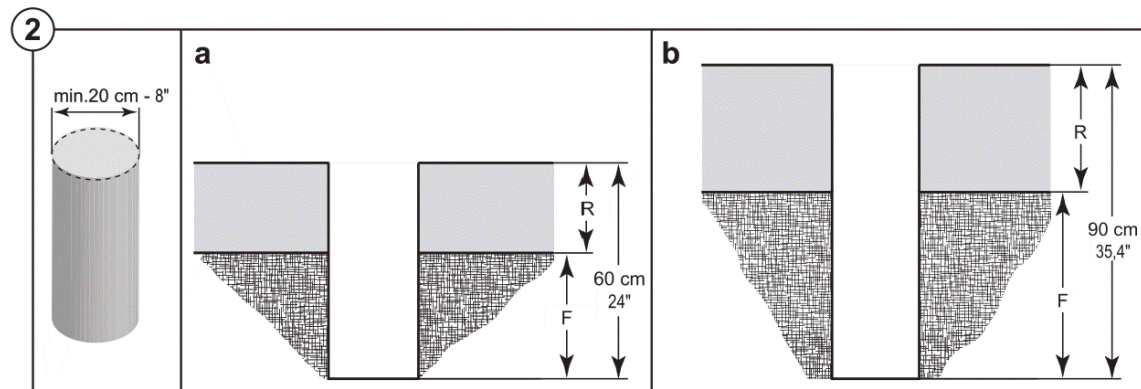
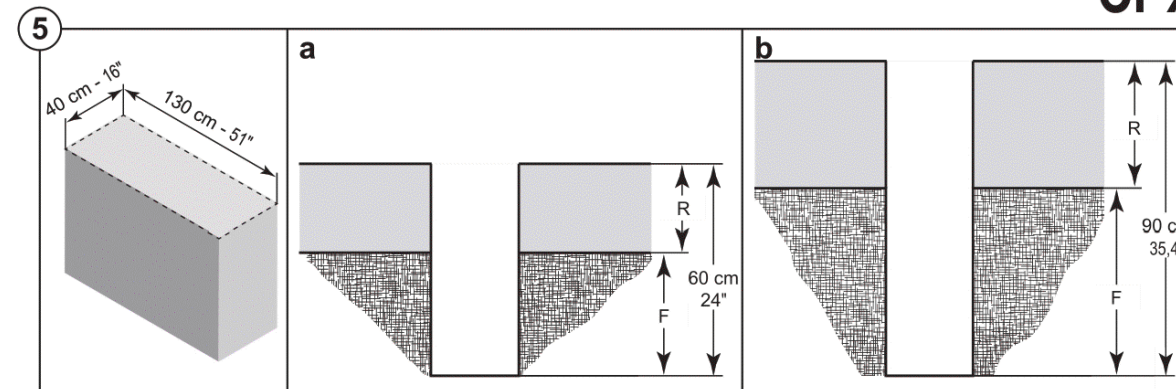
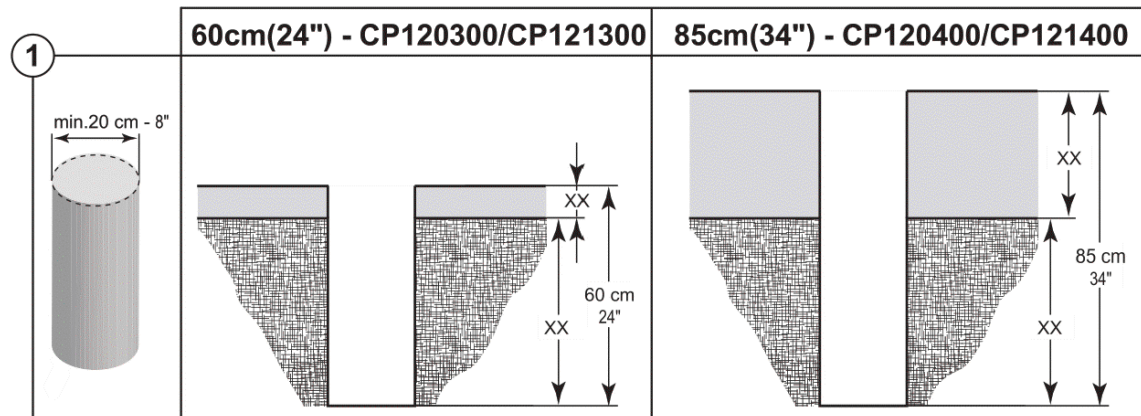
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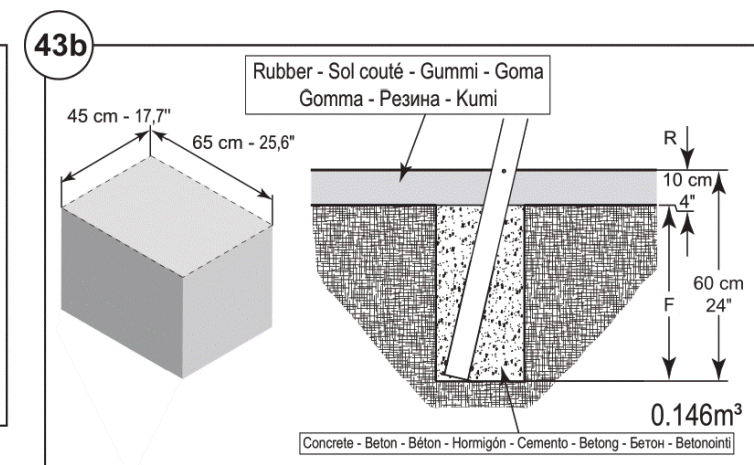
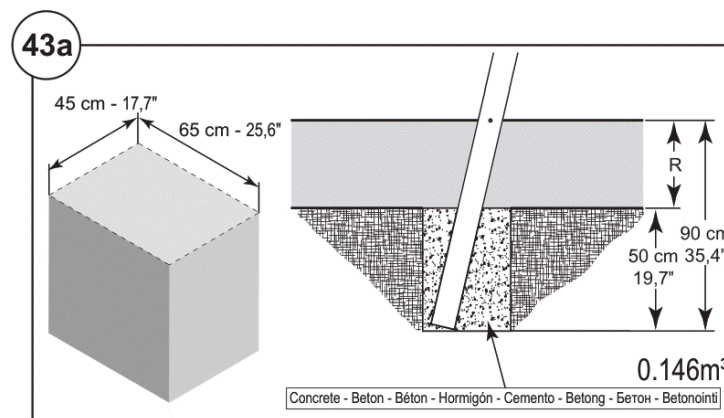
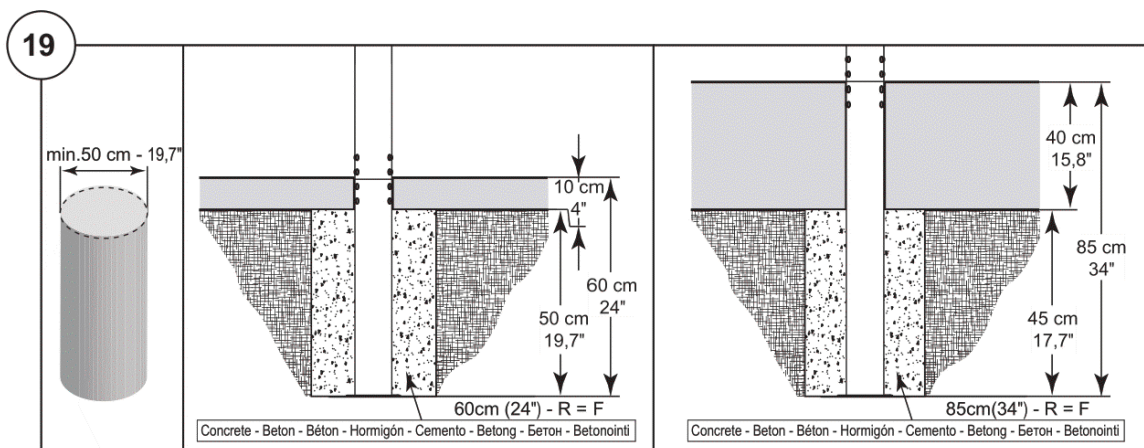
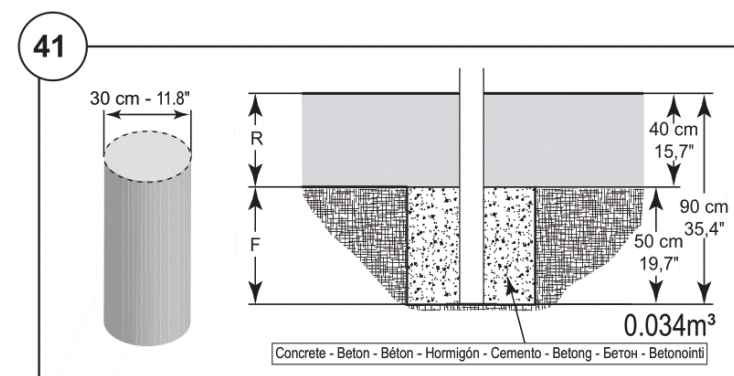
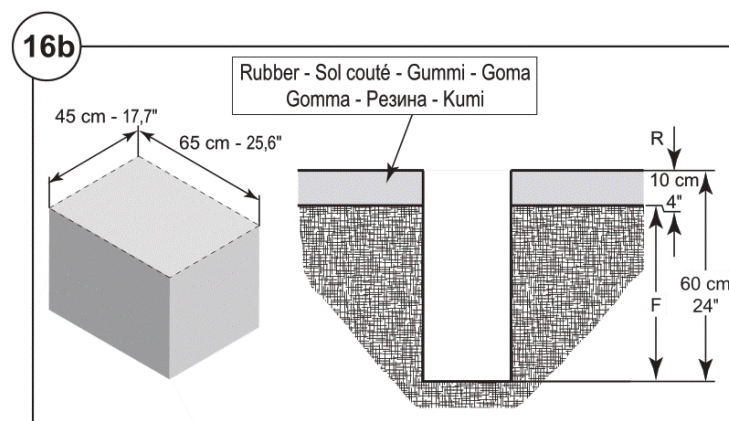
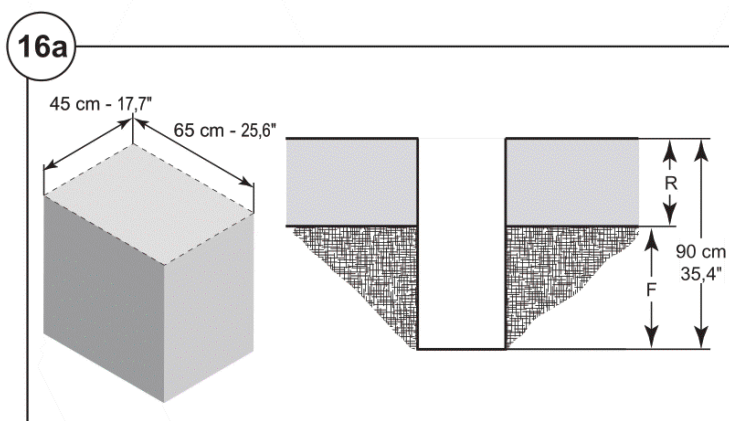
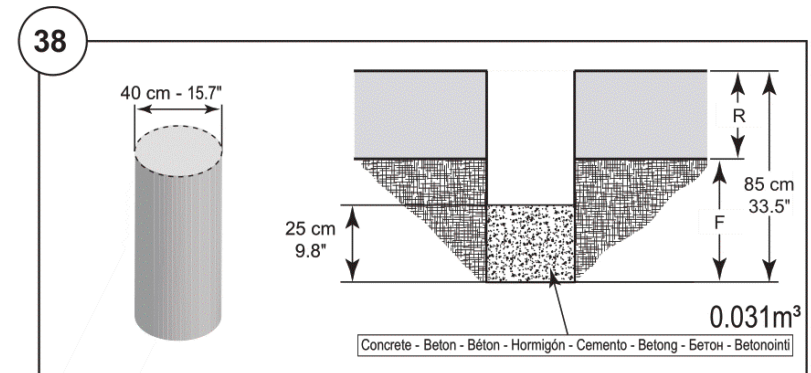
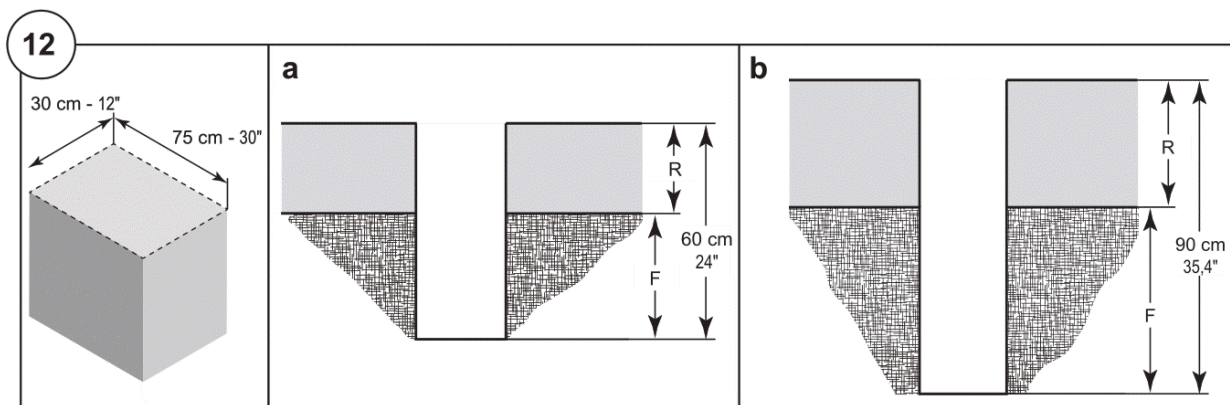
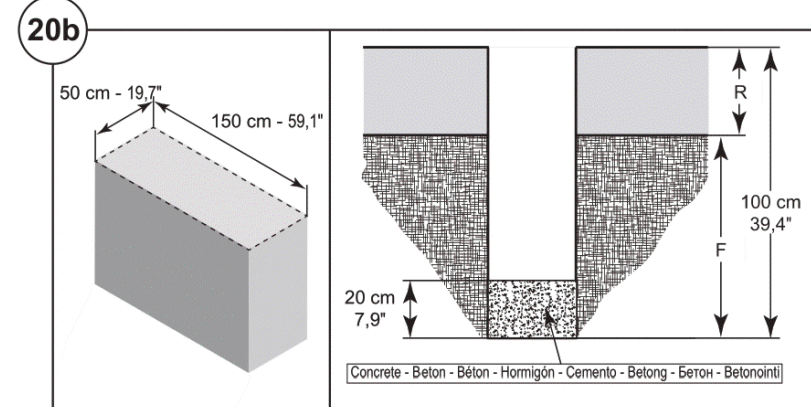
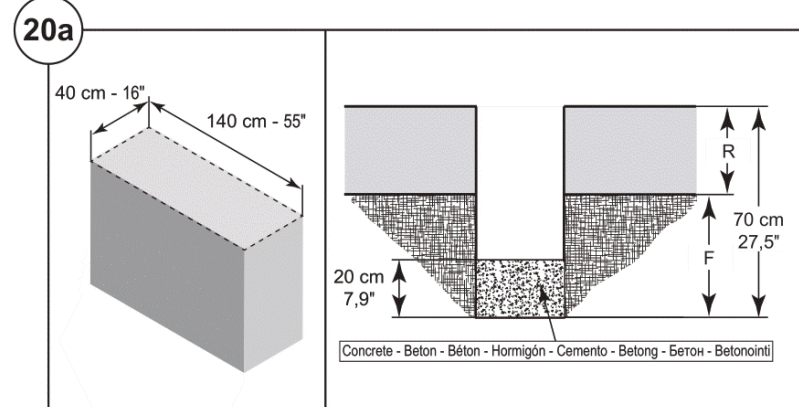
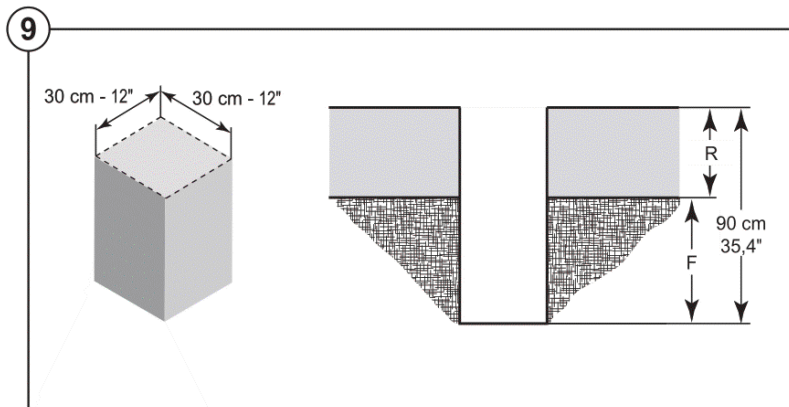
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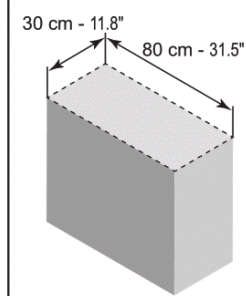
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 Revêtement amortissant - Recubrimiento
 amortiguador - Materiale ammortizzante
 Veiligheidsondergrond - Fallunderlag
 Faldunderlag - Безопасное покрытие
 Turva-alusta

F: Foundation - Fundament - Fondement
 Fondazione - Fundamento - Fonden - Stiftelsen
 Perustus - Stichting - Фонд

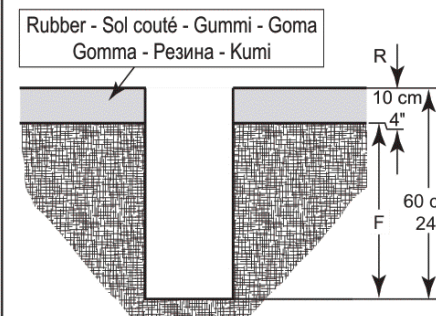




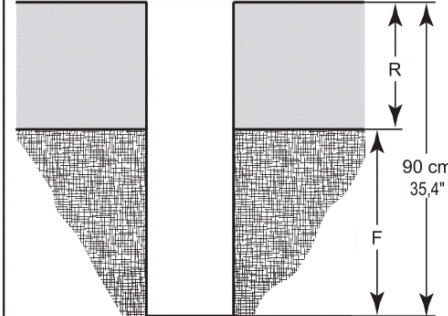
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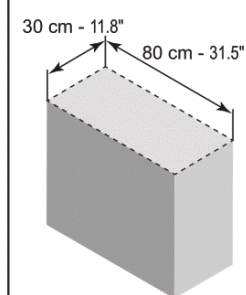
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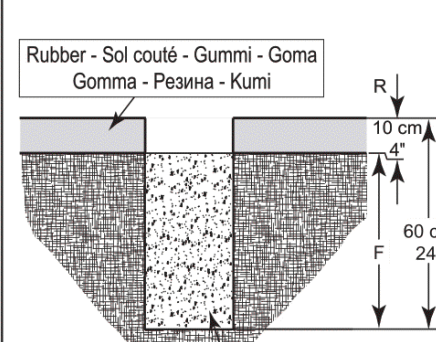
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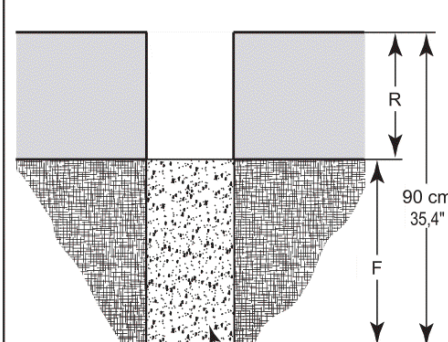
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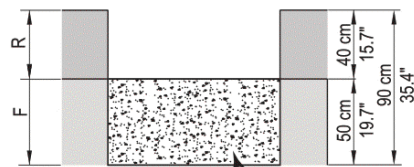
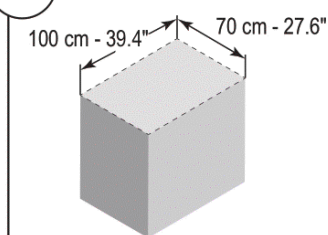
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b

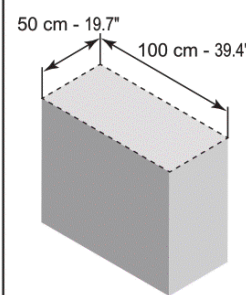
Concrete - Beton - Béton - Hormigón - Cemento - Betong - Бетон - Betonointi
0,120m³Concrete - Beton - Béton - Hormigón - Cemento - Betong - Бетон - Betonointi
0,120m³

46

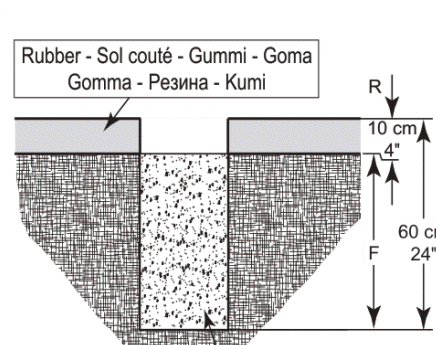
R + F = 90 cm / 35.4"
100 cm / 39.4"
0,350m³

Concrete - Beton - Béton - Hormigón - Cemento - Betong - Бетон - Betonointi

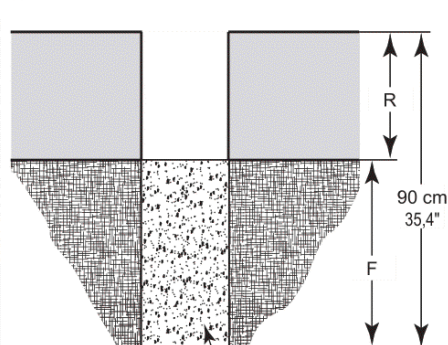
47



a



b

Concrete - Beton - Béton - Hormigón - Cemento - Betong - Бетон - Betonointi
0,250m³Concrete - Beton - Béton - Hormigón - Cemento - Betong - Бетон - Betonointi
0,250m³

Important! The concrete must be sufficiently hardened before the play item may be used.

Wichtig! Vor der Inbetriebnahme des Spielräräts muß der Beton ausreichend abgebunden haben.

Important! Le béton doit avoir suffisamment durci avant de mettre en service l'équipement de jeux.

Importante! El hormigón debe estar suficientemente endurecido antes de comenzar a utilizar el equipo de juego.

Importante! Prima de utilizzare le attrezzature da gioco, il cemento deve essere sufficientemente solidificato.

Belangrijk! Het beton moet voldoende gehard zijn voordat het speeltoestel in gebruik wordt genomen.

Viktigt! Betongen måste ha härdat tillräckligt innan lekredskapet börjar användas.

Viktigt! Betonen skal være tilstrækkeligt hærde, før legeredskabet tages i brug.

Важно! Перед использованием сооружений убедитесь, что бетон затвердел.

HUOM! Betonivalun on oltava tarpeeksi kuiva, ennen kuin leikkivälinettä saa käyttää.

R: Resilient surfacing - Fallschutzbelag - Revêtement amortissant
Recubrimiento amortiguador - Materiale ammortizzante
Veiligheidsondergrond - Fallunderlag - Faldunderlag
Безопасное покрытие - Turva-alusta

F: Foundation - Fundament - Fondement - Fondazione
Fundamento - Fonden - Stiftelsen - Perustus - Stichting - Фонд



PEIRCE SCHOOL

MEO22329 • 04.13.2022



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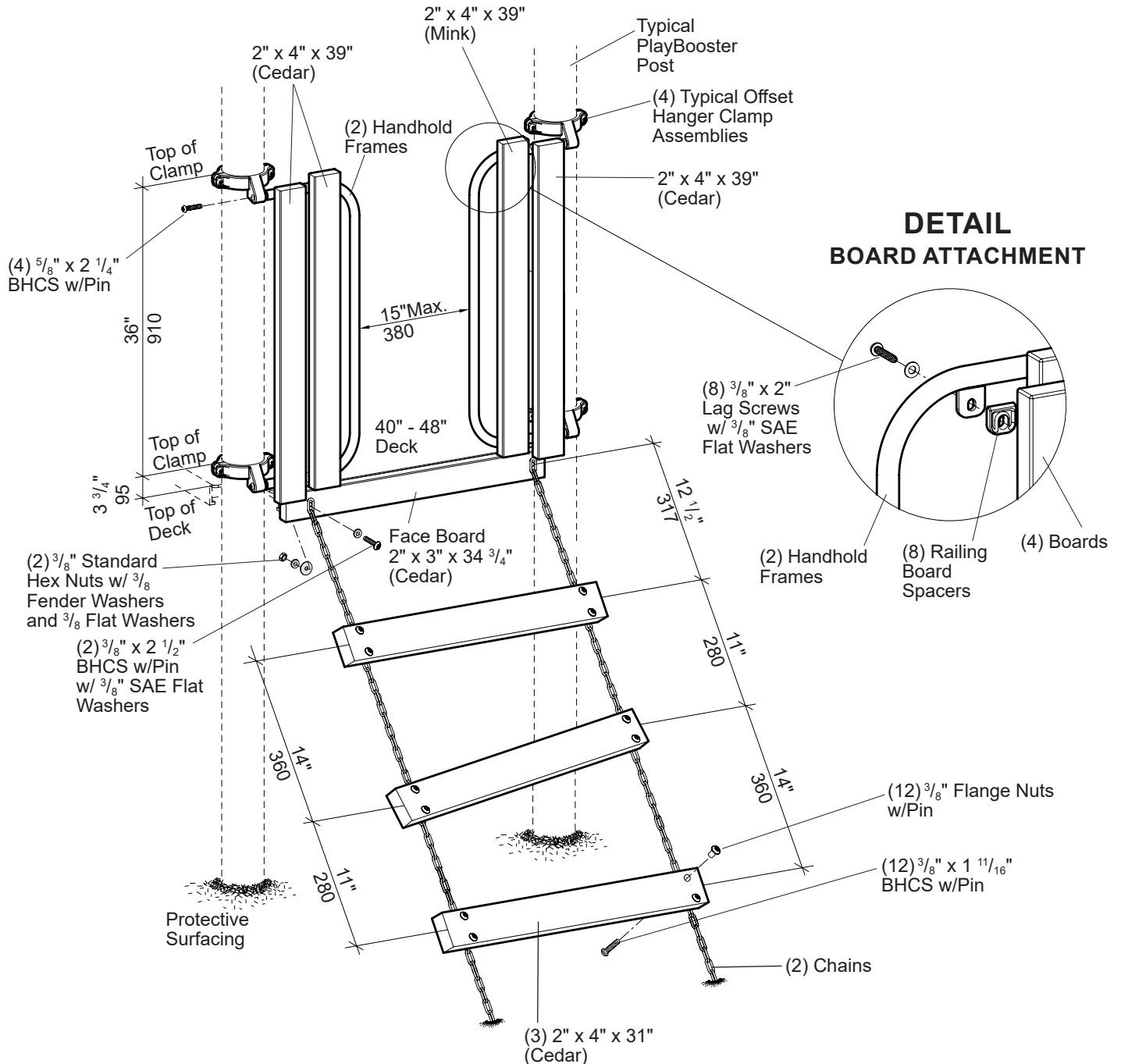


PEIRCE SCHOOL

MEO22329 • 04.13.2022



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Play Naturally™

PlayBooster® 169318 Wood Wiggle Ladder, 40"-48" Deck

Sheet 1 of 2

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 888-574-4678 LSI Install Help 888-438-6574 LSI Direct 763-972-5200 Int. FAX (763) 972-3185

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Document #24972900

Parts List

Part#	Description	Qty.
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
105327	5" Half Clamp, Specify Color	4
113729	Offset Hanger Clamp, Specify Color	4
118029	Support (DB)	2
168211	Handhold Frame, Tan	2
168467	2" x 4" x 39" Board, Cedar or Mink	4
175267	2" x 3" x 34 3/4" Deck Face Board, Cedar	1
169120	2" x 4" x 31" Wiggle Ladder Board, Cedar	3
175251	3/16" x 57 7/16" Chain (40" Deck)	2
174404	3/16" x 67 7/8" Chain (48" Deck)	2
249718	Wiggle Ladder Hardware Package	1
100174	3/8" x 2 1/2" BHCS w/Pin, SST	2
100196	3/8" x 7/8" BHCS w/Pin, SST	2
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100203	5/8" x 2 1/4" BHCS w/Pin, SST	4
100327	3/8" Standard Hex Nut, SST	4
100351	3/8" Tee Nut, SST	8
100353	3/8" Flange Nut w/Pin, SST	12
100365	3/8" SAE Flat Washer, SST	10
123224	3/8" x 1 11/16" BHCS w/Pin, SST	12
139039	3/8" x 2" Lag Screw, SST	8
207485	Railing Board Spacer, Tan	8
100378	3/8" Fender Washer	2
100362	3/8" Flat Washer	2

DB = Direct Bury

Specifications

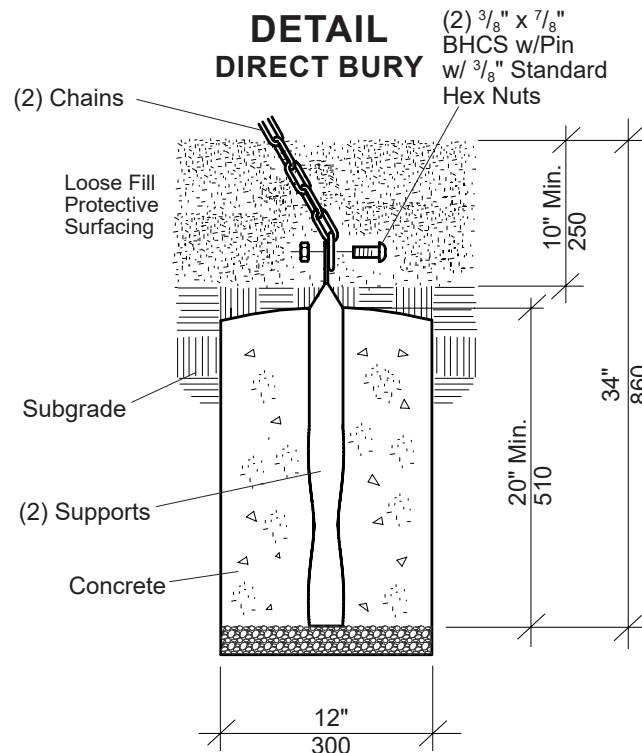
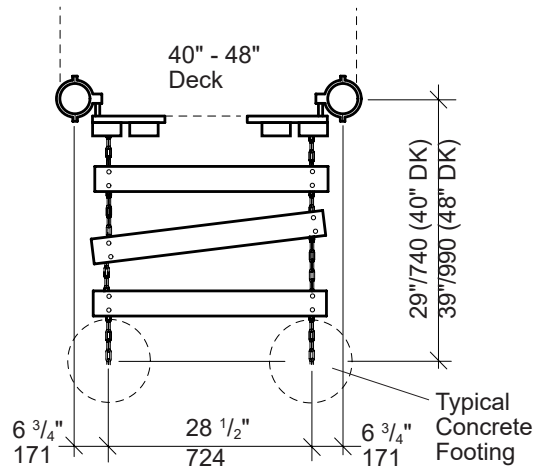
Support (DB):	Fabricated from 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing.
Chain/Uncoated:	Steel 3/16" straight link chain, 800 lb. working load limit. Finish: ProGuard®.
Poly Board:	Recycled high-density polyethylene, cedar or mink in color.
Handhold Frame:	Weldment comprised of 1.125" O.D. 11 GA. (.120") steel tubing with 203 or 303 stainless steel inserts, with 3/8" internal thread and 1/4" HRPO steel plate. Finish: ProShield®, tan in color.
Clamps:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	Approx. 3.5 man hours
Concrete:	Approx. 2.6 cu. ft.
Weight:	79 lbs. (40" Deck) 79 lbs. (48" Deck)

Fall Height: Deck Height

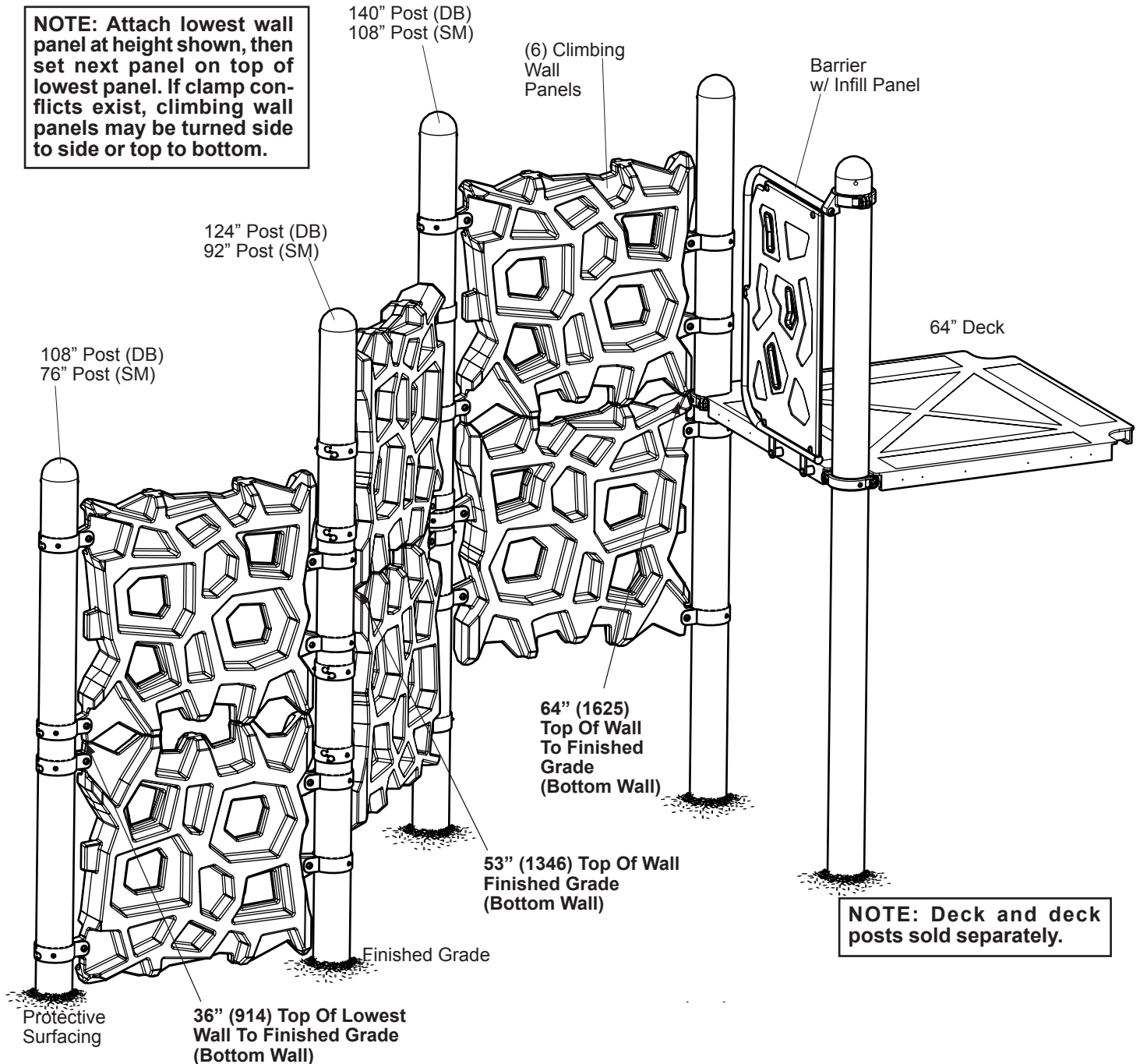
Installation Instructions

- 1) Drill 7/16" holes thru face board, using pilot holes as a guide. Attach chains and deck face board to the face of deck, using 3/8" x 2 1/2" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" flat washers and 3/8" fender washers.
- 2) Attach offset hanger clamps to posts at heights shown using 5" half clamps, 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 3) Attach handhold frames to offset hanger clamps, using 5/8" x 2 1/4" BHCS w/Pin.
- 4) Line up pilot holes in boards with spacers and handhold frame tabs and attach, using 3/8" x 2" lag screws with 3/8" SAE flat washers. Refer to the Board Attachment Detail.
- 5) Attach boards to chains, using 3/8" x 1 11/16" BHCS w/pin and 3/8" flange nuts w/pin.
- 6) Determine footing locations by pulling chains tight and laying end on subgrade. Dig footing holes where chains meet subgrade to the width and depth shown.
- 7) Fasten chains to the supports using 3/8" x 7/8" BHCS w/pin and 3/8" standard hex nuts.
- 8) Pour concrete into footing holes. Push supports into concrete until chain is tight and top of support is positioned 1 3/4" above subgrade. Temporarily brace supports into position until concrete has cured. Refer to the Direct Bury Detail.
- 9) After concrete has cured a minimum of 72 hours, remove support brace and install protective surfacing before users are allowed to play on the structure.

PLAN VIEW/FOOTING LAYOUT



NOTE: Attach lowest wall panel at height shown, then set next panel on top of lowest panel. If clamp conflicts exist, climbing wall panels may be turned side to side or top to bottom.



64" Deck Height Shown
72" Deck Height Shown On Sheet 2

PlayBooster®

220544 GeoPlex™ Ground-To-Deck Triple Climber, 64" & 72" Decks

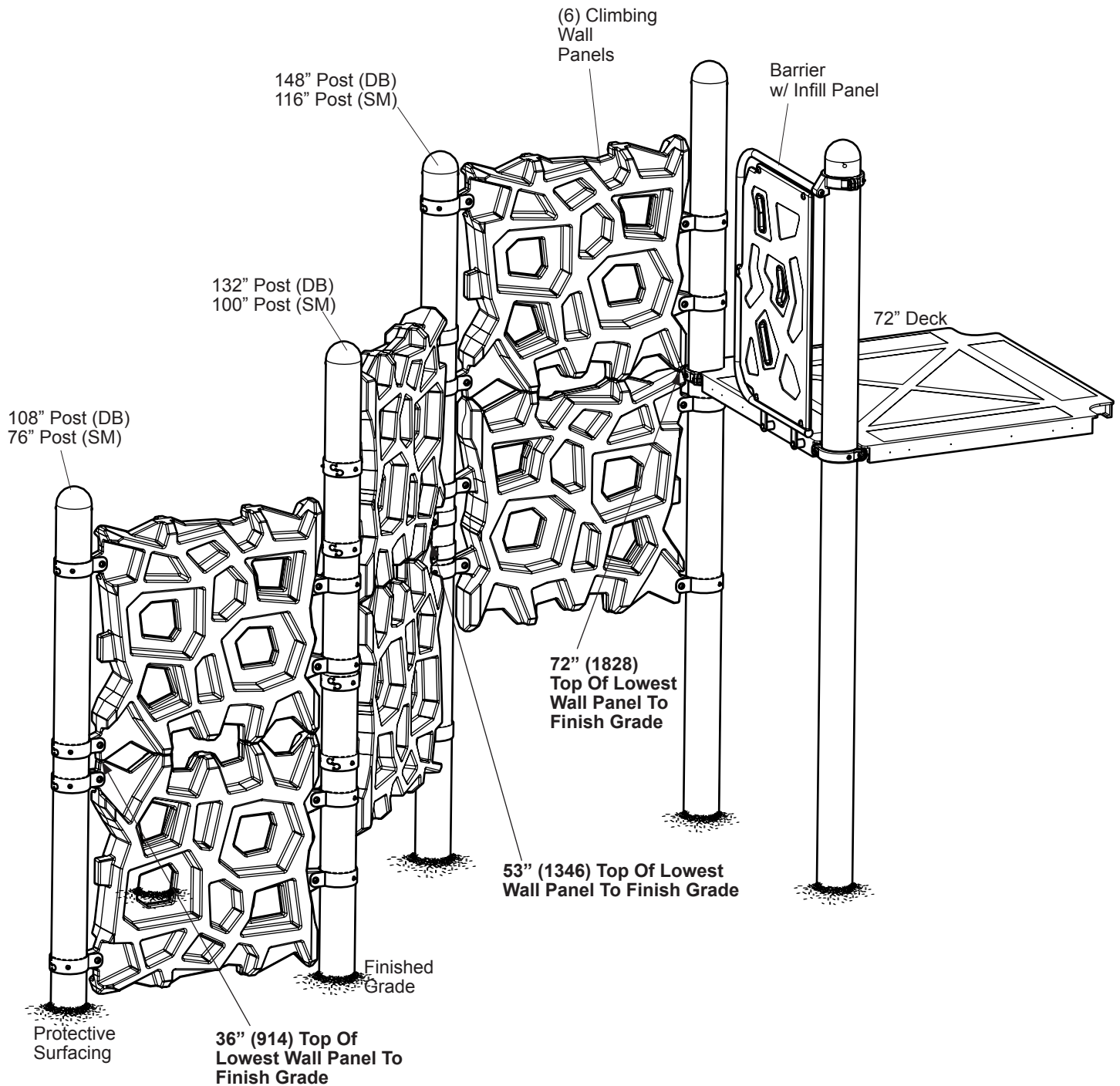
601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 888-574-4678 LSI Install Help 888-438-6574 LSI Direct 763-972-5200 Int. FAX (763) 972-3185

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Sheet 1 of 6 Document #22264200

SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)



72" Deck Shown

NOTE: Deck and deck posts sold separately.

NOTE: Attach lowest wall panel at height shown, then turn next panel front to back, and set on top of lowest panel.

PlayBooster®

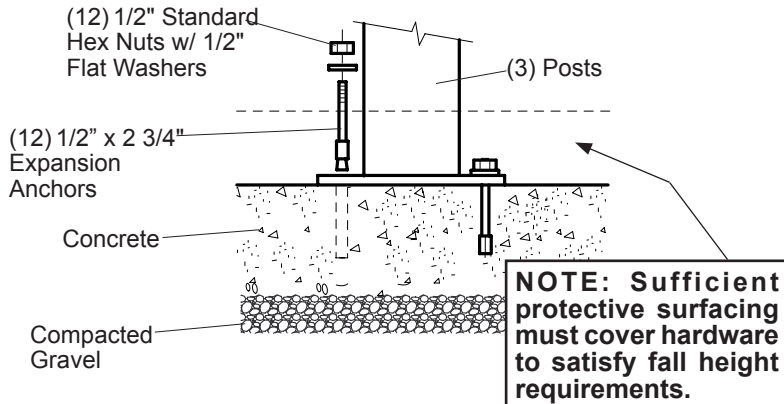
220544 GeoPlex™ Ground-To-Deck Triple Climber, 64" & 72" Decks

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 888-574-4678 LSI Install Help 888-438-6574 LSI Direct 763-972-5200 Int. FAX (763) 972-3185

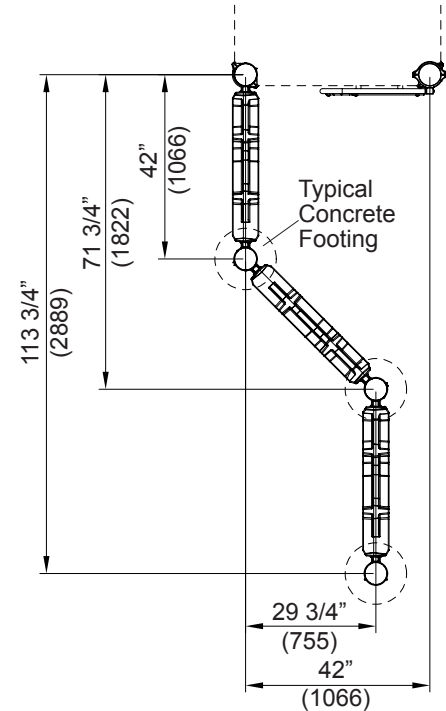
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Sheet 2 of 6

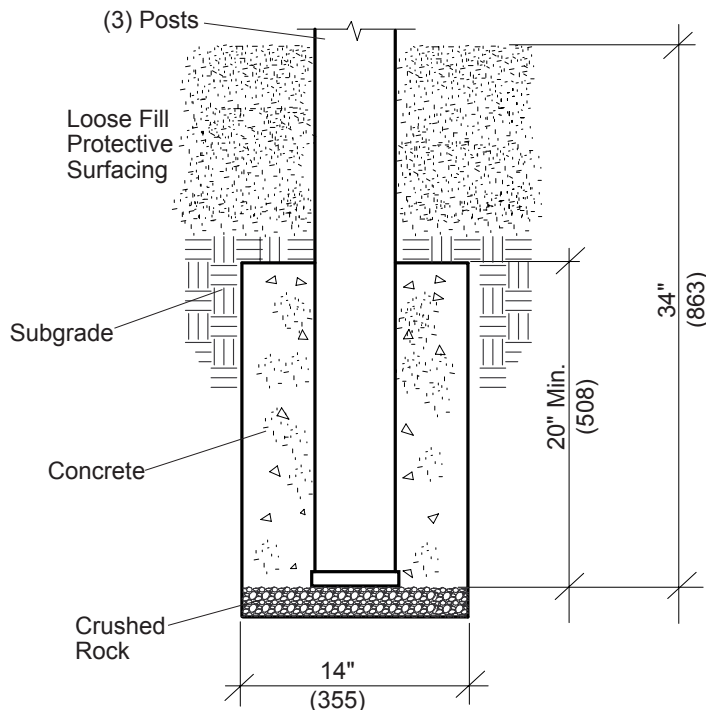
**DETAIL
SURFACE MOUNT**



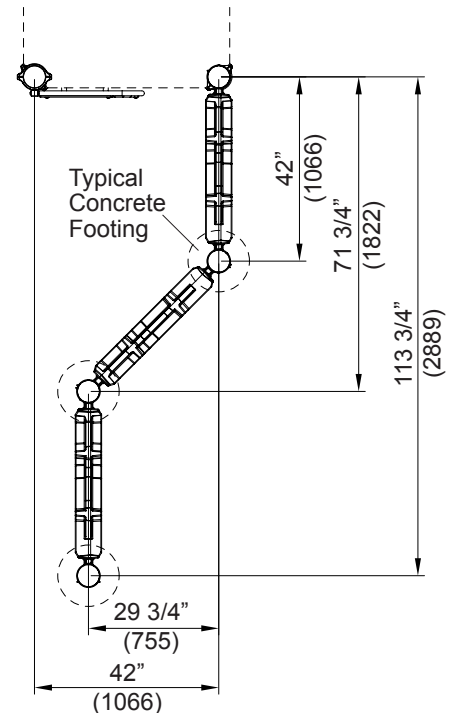
**PLAN VIEW/FOOTING LAYOUT
RIGHT CONFIGURATION**



**DETAIL
DIRECT BURY**



LEFT CONFIGURATION



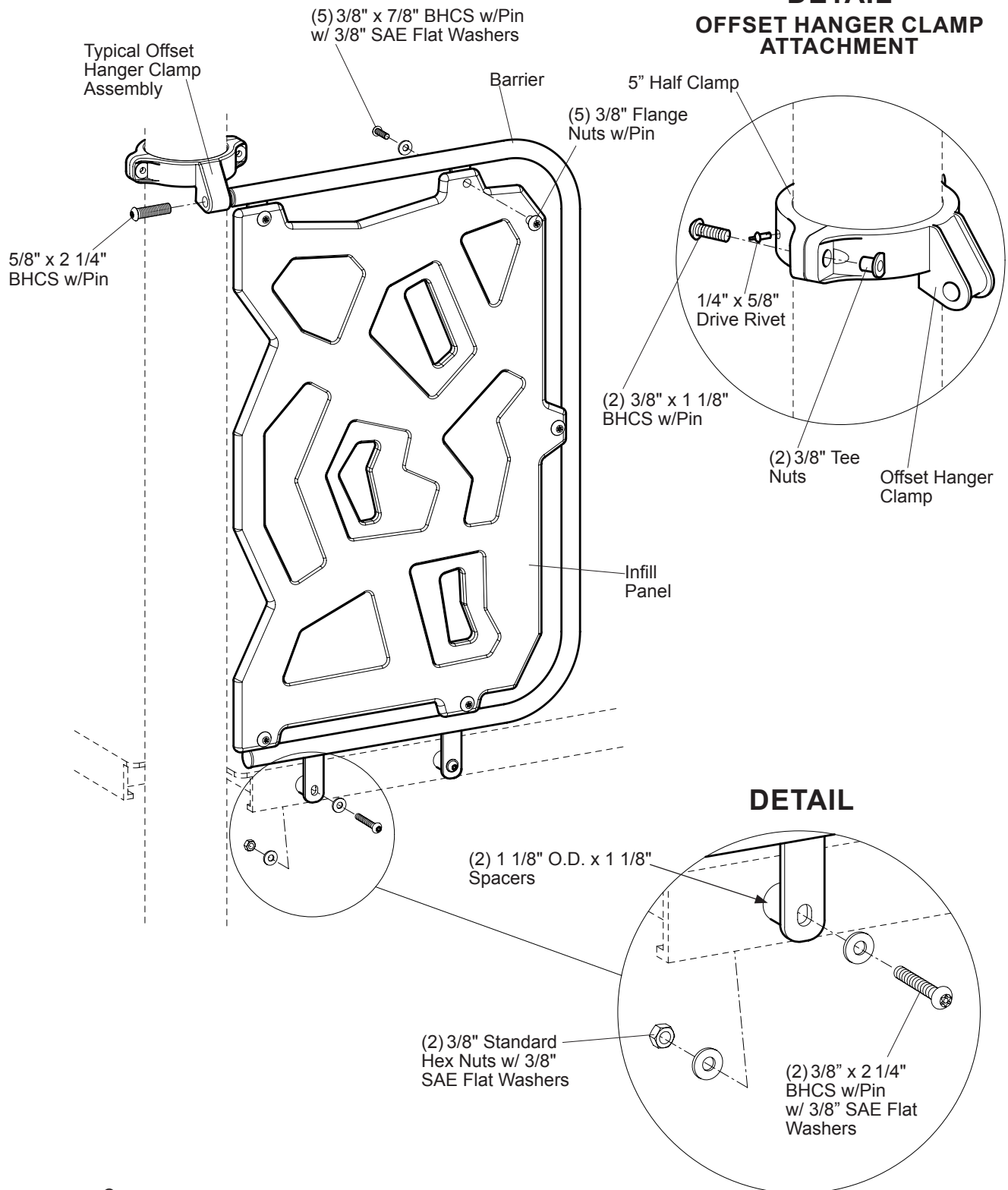
PlayBooster®

220544 GeoPlex™ Ground-To-Deck Triple Climber, 64" & 72" Decks

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 888-574-4678 LSI Install Help 888-438-6574 LSI Direct 763-972-5200 Int. FAX (763) 972-3185

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Sheet 3 of 6 Document #22264200



PlayBooster®

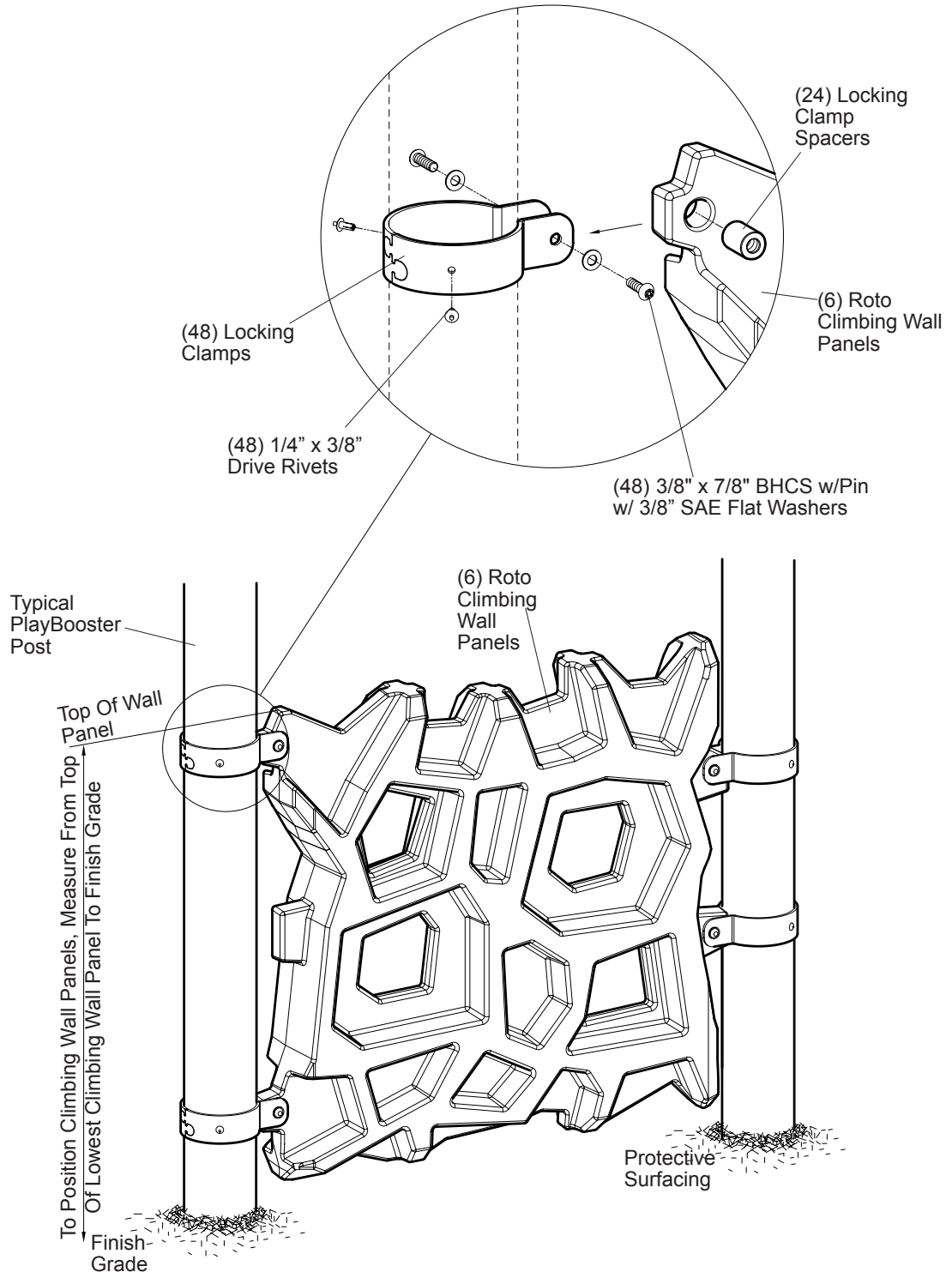
220544 GeoPlex™ Ground-To-Deck Triple Climber, 64" & 72" Decks

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 888-574-4678 LSI Install Help 888-438-6574 LSI Direct 763-972-5200 Int. FAX (763) 972-3185

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Sheet 4 of 6

DETAIL



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Sheet 5 of 6 Document #22264200

220544 GeoPlex™ Ground-To-Deck Triple Climber, 64" & 72" Decks

Parts List

Part#	Description	Qty.
100611	1/4" x 3/8" Drive Rivet, AL./SST	48
100610	1/4" x 5/8" Drive Rivet, AL./SST	1
105327	5" Half Clamp, Specify Color	1
113729	5" Offset Hanger Clamp, Specify Color.....	1
107703	132" Aluminum Post w/Cap, DB, Specify Color.....	*
107709	140" Aluminum Post w/Cap, DB, Specify Color.....	*
107714	148" Aluminum Post w/Cap, DB, Specify Color.....	*
107700	124" Aluminum Post w/Cap, DB, Specify Color.....	*
107691	108" Aluminum Post w/Cap, DB, Specify Color.....	*
107527	132" Steel Post w/Cap, DB, Specify Color	*
107531	140" Steel Post w/Cap, DB, Specify Color	*
107537	148" Steel Post w/Cap, DB, Specify Color	*
107525	124" Steel Post w/Cap, DB, Specify Color	*
107517	108" Steel Post w/Cap, DB, Specify Color	*
107630	100" Aluminum Post w/Cap, SM, Specify Color.....	*
107635	108" Aluminum Post w/Cap, SM, Specify Color.....	*
107640	116" Aluminum Post w/Cap, SM, Specify Color.....	*
107626	92" Aluminum Post w/Cap, SM, Specify Color.....	*
107620	76" Aluminum Post w/Cap, SM, Specify Color.....	*
107474	100" Steel Post w/Cap, SM, Specify Color.....	*
107481	116" Steel Post w/Cap, SM, Specify Color	*
107477	108" Steel Post w/Cap, SM, Specify Color	*
107472	92" Steel Post w/Cap, SM, Specify Color.....	*
107469	76" Steel Post w/Cap, SM, Specify Color.....	*
151072	1 1/8" O.D. x 1 1/8" Spacer, Specify Color	2
170930	Barrier, Specify Color.....	1
218756	Barrier Infill Panel, Specify Color.....	1
215288	Roto Climbing Wall Panel, Specify Color.....	6
218924	Locking Clamp, Specify Color.....	48
170993	Single Barrier w/Infill Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST.....	5
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	2
100199	3/8" x 2 1/4" BHCS w/Pin, SST.....	2
100203	5/8" x 2 1/4" BHCS w/Pin, SST.....	1
100327	3/8" Standard Hex Nut, SST	2
100351	3/8" Tee Nut, SST.....	2
100353	3/8" Flange Nut w/Pin, SST	5
100365	3/8" SAE Flat Washer, SST.....	9
221222	Roto Molded Wall Hardware Package	6
100196	3/8" x 7/8" BHCS w/Pin, SST.....	48
100365	3/8" SAE Flat Washer, SST.....	48
215287	Locking Clamp Spacer, Aluminum	24
121348	4-Hole SM Hardware Package	3
100266	1/2" x 2 3/4" Expansion Anchor.....	12
100322	1/2" Standard Hex Nut, SST	12
100363	1/2" Flat Washer, SST	12

DB=Direct Bury

SM=Surface Mount

* = Quantity Determined By Your Order

Specifications

Posts: See PlayBooster® (PB) General Specifications.

Infill Panel: Recycled Permalene®, color specified.

Locking Clamp: Fabricated from 7GA. (.179")(4,54 mm) stainless steel. Finish: ProShield®, color specified.

Barrier: Weldment comprised of 1.125" (28,57 mm) O.D. 11 GA. (.120") (3,05 mm) steel tube per ASTM A513 with 203 or 303 stainless steel threaded inserts with 5/8" (15,87 mm) internal threads and 1/4" (6,35 mm) tabs. Finish: TenderTuff™, color specified.

Specifications are subject to change without notice.

Climbing Wall: Rotationally molded from U.V. stabilized linear low density polyethylene, color specified. Wall measures 37" (939 mm) wide x 34" (863 mm) high.

Clamps: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: DB Approx. 10 1/2 labor hours
SM Approx. 9 labor hours

Concrete Req.: DB - Approx. 5.34 cu. ft.

Weight: **64" Deck**

DB 336 lbs. with Aluminum Posts

DB 470 lbs. with Steel Posts

SM 329 lbs. with Aluminum Posts

SM 434 lbs. with Steel Posts

72" Deck

DB 338 lbs. with Aluminum Posts

DB 471 lbs. with Steel Posts

SM 328 lbs. with Aluminum Posts

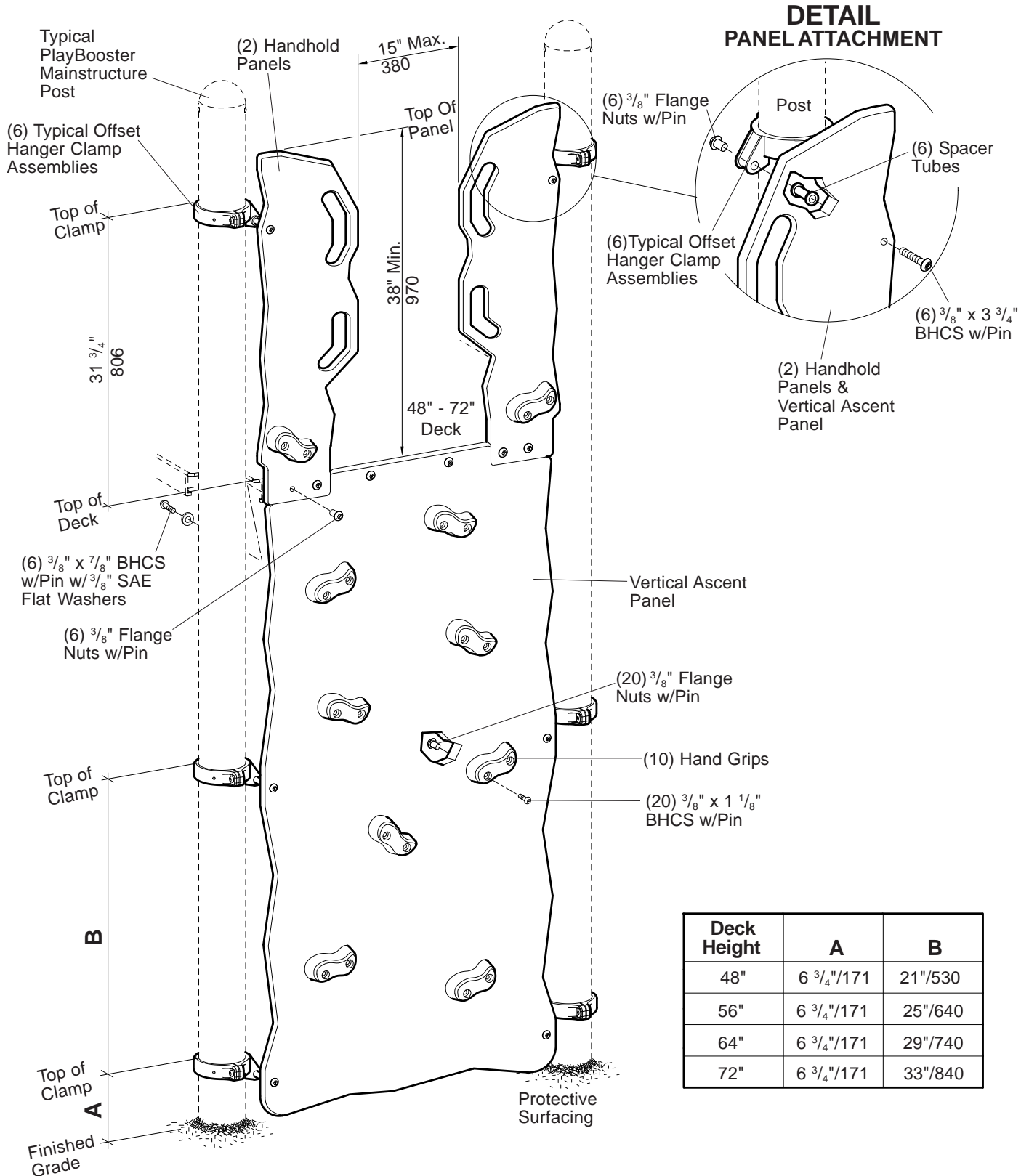
SM 434 lbs. with Steel Posts

Fall Height: 98" (2489 mm) 64" Deck

106" (2692 mm) 72" Deck

Installation Instructions

- (Direct Bury)** Dig footing holes as shown. Refer to the Plan View/Footing Layout.
- Attach barrier to deck.
- Attach offset hanger clamp to barrier.
- Attach offset hanger clamp to post. Refer to the Offset Hanger Clamp Attachment Detail.
- Attach infill panel to barrier.
- Attach roto climbing wall panels to posts at height shown. See Detail.
- Install 1/4" x 5/8" drive rivets in 5" half clamps. Drill through clamp and into 5" post with a 1/4" or "F" (only) drill bit, insert drive rivet in hole through clamp and into post. Hammer drive rivet pin in until flush with head.
- Install 1/4" x 3/8" drive rivets in locking clamps. Drill through locking clamp and into 5" post with a 1/4" or "F" (only) drill bit, insert drive rivet in hole through clamp and into post. Hammer drive rivet pin in until flush with head.
- (Direct Bury)** With climber in final position, pour concrete footings. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on the structure.
- (Surface Mount)** Drill 1/2" x 3" deep holes through post plates using hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Fasten post plates to expansion anchors, using 1/2" standard hex nuts with 1/2" flat washers.
- Install protective surfacing before users are allowed to play on the structure.



Deck Height	A	B
48"	6 3/4"/171	21"/530
56"	6 3/4"/171	25"/640
64"	6 3/4"/171	29"/740
72"	6 3/4"/171	33"/840

PlayBooster®

145624 Vertical Ascent®, 48"-72"

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 888-574-4678 LSI Install Help 888-438-6574 LSI Direct 763-972-5200 Int. FAX (763) 972-3185

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Document #18298100

Parts List

Part#	Description	Qty.
182957	Vertical Ascent Handhold Panel, Specify Color.....	2
145597	Vertical Ascent Panel, 48" Deck, Specify Color	1
145596	Vertical Ascent Panel, 56" Deck, Specify Color	1
145595	Vertical Ascent Panel, 64" Deck, Specify Color	1
145585	Vertical Ascent Panel, 72" Deck, Specify Color	1
105327	5" Half Clamp, Specify Color	6
113729	Offset Hanger Clamp, Specify Color	6
113468	Spacer Tube, Specify Color	6
100610	1/4" x 5/8" Drive Rivet, AL/SST	6
145792	Hand Grip Set	1
143110	Hand Grip, Blue	2
143110	Hand Grip, Yellow	2
143110	Hand Grip, Red	3
143110	Hand Grip, Green	3
145616	Vertical Ascent Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	6
100198	3/8" x 1 1/8" BHCS w/Pin, SST	32
100351	3/8" Tee Nut, SST	12
100353	3/8" Flange Nut w/Pin, SST	32
100365	3/8" SAE Flat Washer, SST	6
124460	3/8" x 3 3/4" BHCS w/Pin, SST	6

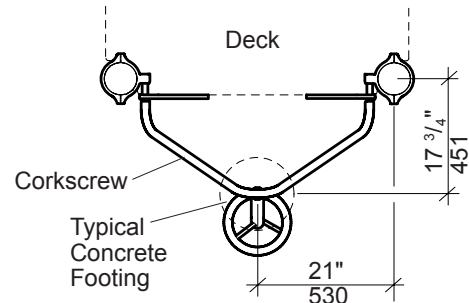
Specifications

Hand Grip:	Made from Polyester Resin. Hand Grips measure approx. 5 3/4" long x 2 1/4" wide x 1 3/4" high.
Panels:	Solid color Permalene®, color specified.
Spacer Tube:	Made from 6061-T6 aluminum 7/8" O.D. Finish: ProShield®, color specified.
Clamps:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	Approx. 2 man hours
Weight:	48" Deck Height - 83 lbs. 56" Deck Height - 91 lbs. 64" Deck Height - 99 lbs. 72" Deck Height - 106 lbs.
Fall Height:	53 1/2"/1358 (48" Deck Height) 61 1/2"/1562 (56" Deck Height) 69 1/2"/1765 (64" Deck Height) 77 1/2"/1968 (72" Deck Height)

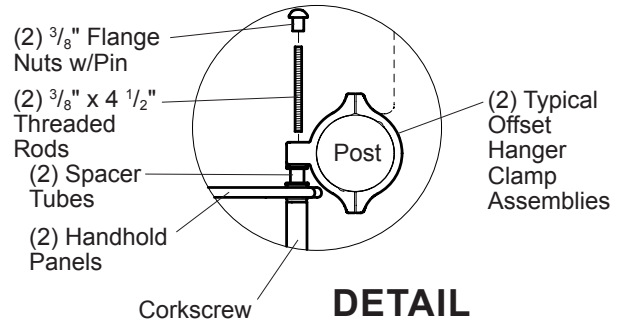
Installation Instructions

- 1) Attach handhold panels and vertical ascent panel to deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin, as shown.
- 2) Attach handhold panels and vertical ascent panel to offset hanger clamps using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. Refer to the Panel Attachment Detail.
- 3) Attach offset hanger clamps to posts at heights shown using 5" half clamps, 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 4) Attach hand grips to handhold panels and vertical ascent panel using 3/8" x 1 1/8" BHCS w/pin and 3/8" flange nuts w/pin, as shown.
- 5) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 6) Install protective surfacing before users are allowed to play on the structure.

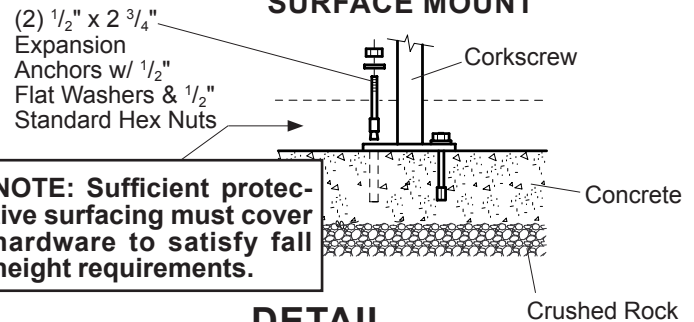
PLAN VIEW/ FOOTING LAYOUT



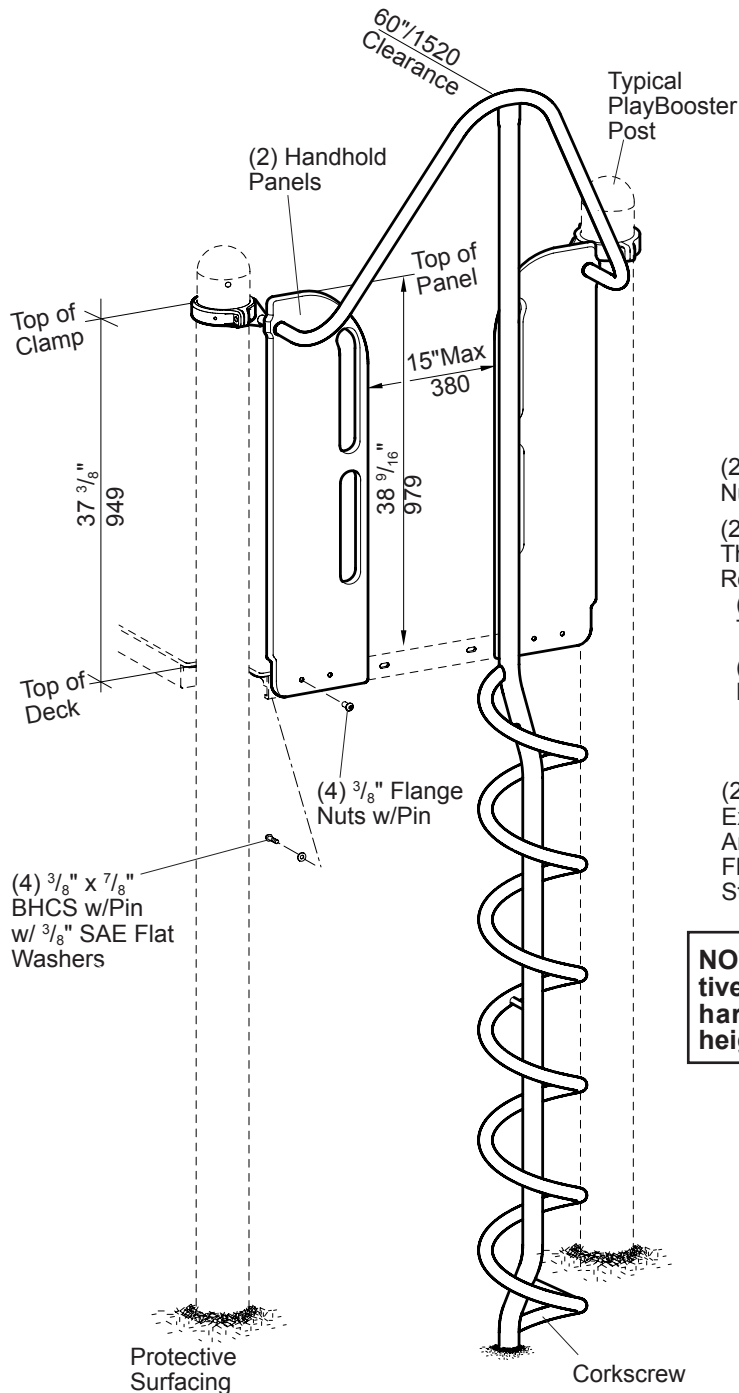
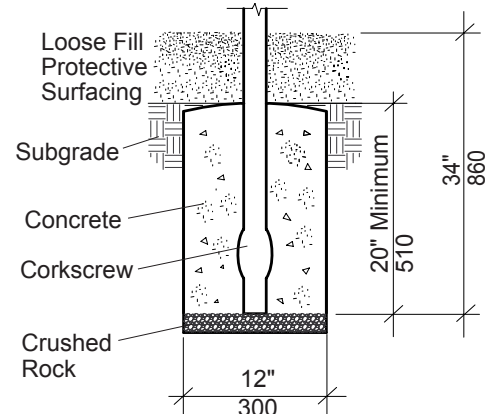
DETAIL HANDHOLD PANEL ATTACHMENT



DETAIL SURFACE MOUNT



DETAIL DIRECT BURY



72" Deck Height Shown

PlayBooster®

148432 Corkscrews, 32"-72" Decks

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 888-574-4678 LSI Install Help 888-438-6574 LSI Direct 763-972-5200 Int. FAX (763) 972-3185

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Document #14814600

Parts List

Part#	Description	Qty.
147954	Handhold Panel, Specify Color	2
105327	5" Half Clamp, Specify Color	2
113729	Offset Hanger Clamp, Specify Color	2
147941	Corkscrew, 32" Deck (DB), Specify Color	1
147942	Corkscrew, 40" Deck (DB), Specify Color	1
147943	Corkscrew, 48" Deck (DB), Specify Color	1
146511	Corkscrew, 56" Deck (DB), Specify Color	1
146512	Corkscrew, 64" Deck (DB), Specify Color	1
146513	Corkscrew, 72" Deck (DB), Specify Color	1
146514	Corkscrew, 32" Deck (SM), Specify Color	1
146515	Corkscrew, 40" Deck (SM), Specify Color	1
146516	Corkscrew, 48" Deck (SM), Specify Color	1
146517	Corkscrew, 56" Deck (SM), Specify Color	1
146518	Corkscrew, 64" Deck (SM), Specify Color	1
146519	Corkscrew, 72" Deck (SM), Specify Color	1
113468	7/8" O.D. x 1 11/16" Spacer Tube, Specify Color	2
100610	1/4" x 5/8" Drive Rivet, AL/SST	2
148176	Pole Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100351	3/8" Tee Nut, SST	4
100353	3/8" Flange Nut w/Pin, SST	6
100365	3/8" SAE Flat Washer, SST	4
148081	3/8" x 4 1/2" Threaded Rod, SST	2
111392	2-Hole (SM) Hardware Package	1
100266	1/2" x 2 3/4" Expansion Anchors	2
100322	1/2" Standard Hex Nut, SST	2
100363	1/2" Flat Washer, SST	2

DB = Direct Bury

SM = Surface Mount

Specifications

Corkscrew: Weldment comprised of 1.900" O.D. RS-40 (.120 - .130") galvanized steel tubing, and 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing. Finish: ProShield®, color specified.

Handhold Panel: Solid color Permalene®, color specified.

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: SM - Approx. 1 1/2 man hours
DB - Approx. 2 man hours

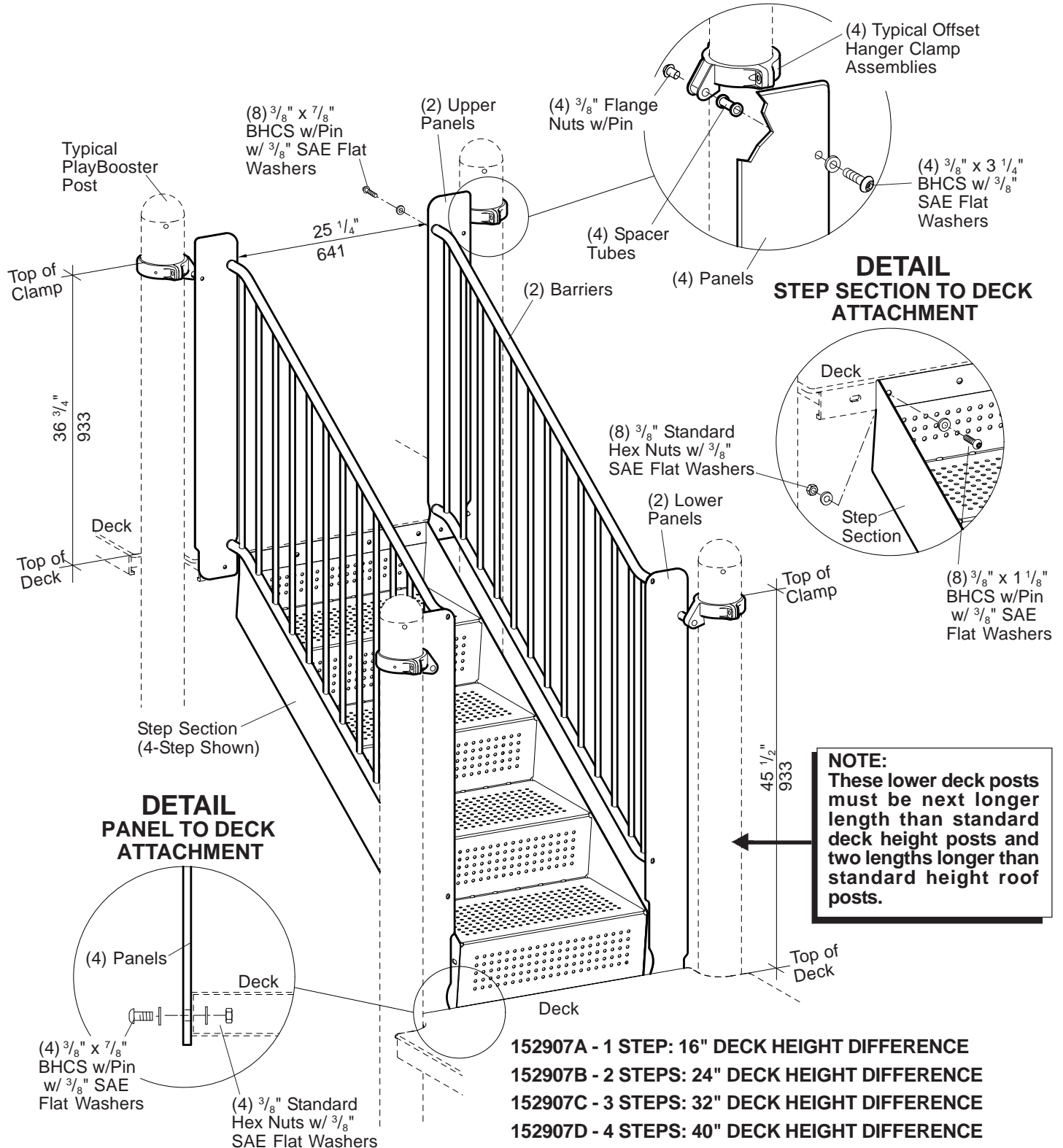
Concrete Req.: Approx. 1.3 cu. ft.
Weight: 67 lbs. (32"-48" Deck)
79 lbs. (56"-72" Deck)

Fall Height: 48" (1220 mm) - (32", 40" & 48" Deck Heights)
72" (1830 mm) - (56", 64" & 72" Deck Heights)

Installation Instructions

- 1) **(Direct Bury)** Dig footing hole as shown. Refer to the Plan View/Footing Layout.
 - 2) Attach offset hanger clamps to posts at heights shown using 5" half clamps, 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
 - 3) Attach handhold panels to the face of the deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin.
 - 4) Attach corkscrew to handhold panels and offset hanger clamps using 3/8" flange nuts w/pin, 3/8" x 4 1/2" threaded rods and spacer tubes. Refer to the Handhold Panel Attachment Detail. **NOTE: Turn 3/8" x 4 1/2" threaded rod into 3/8" flange nut w/pin until it bottoms out, before attaching corkscrew.**
 - 5) **(Direct Bury)** With corkscrew plumb, pour concrete footing. Allow concrete footing to cure a minimum of 72 hours before users are allowed to play on the structure.
- (Surface Mount)** Drill 1/2" x 3" deep holes through support plate using hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Fasten support plates to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.
- 6) Install protective surfacing before users are allowed to play on the structure.

**DETAIL
PANEL TO CLAMP
ATTACHMENT**



Parts List

Part#	Description	Qty.
144696	1-Step Section, Specify Color	1
144698	2-Step Section, Specify Color	1
144700	3-Step Section, Specify Color	1
144702	4-Step Section, Specify Color	1
144703	1-Step Barrier, Specify Color	2
144705	2-Step Barrier, Specify Color	2
144707	3-Step Barrier, Specify Color	2
144709	4-Step Barrier, Specify Color	2
153896	Lower Panel, Specify Color	2
153895	Upper Panel, Specify Color	2
113468	Spacer Tube, Specify Color	4
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
105327	5" Half Clamp, Specify Color	4
113729	Offset Hanger Clamp, Specify Color	4
156283	Deck Link Barr/Hrail Hardware Package	1
100168	3/8" x 3 1/4" BHCS, SST	4
100196	3/8" x 7/8" BHCS w/Pin, SST	12
100198	3/8" x 1 1/8" BHCS w/Pin, SST	16
100327	3/8" Standard Hex Nut, SST	12
100351	3/8" Tee Nut, SST	8
100353	3/8" Flange Nut w/Pin, SST	4
100365	3/8" SAE Flat Washer, SST	36

Specifications

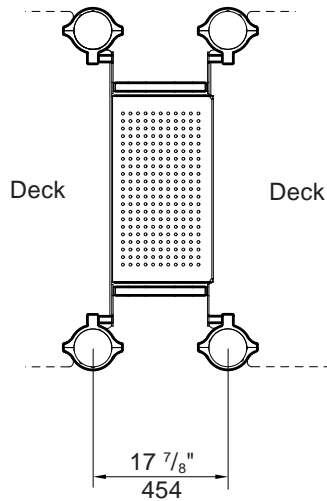
Panels:	Zinc plated 7 GA. (.179") HR flat steel. Finish: ProShield®, color specified.
Step Section:	Formed from 12 GA (.105) sheet steel conforming to ASTM A1011. Standing surface is 24 3/8" wide x 14" deep and is perforated with 5/16" diameter holes. Finish: TenderTuff, color specified.
Barrier:	Weldment comprised of 1.125" O.D. x 11 Ga. (.120" wall) steel tubing, 5/8" O.D. steel bar with 203 or 303 stainless steel inserts with 3/8" internal threads. Finish: TenderTuff, color specified.
Spacer Tube:	Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.
Clamps:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	Approx. 1 1/2 man hours
Weight:	1-Step - 130 lbs. 2-Step - 182 lbs. 3-Step - 236 lbs. 4-Step - 296 lbs.
Fall Height:	Deck Height

Installation Instructions

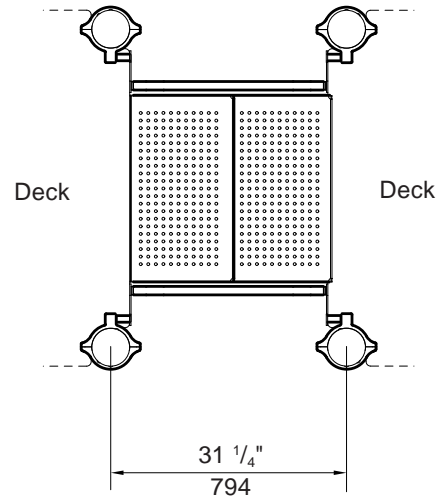
- 1) Attach step section to decks using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers, as shown. Refer to the Step Section To Deck Attachment Detail.
- 2) Attach upper and lower panels to the face of the deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer to the Panel to Deck Attachment Detail.
- 3) Attach offset hanger clamps to posts at heights shown using 5" half clamps, 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 4) Attach upper and lower panels to offset hanger clamps using 3/8" x 3 1/4" BHCS with 3/8" SAE flat washers, spacer tubes and 3/8" flange nuts w/pin. Refer to the Panel To Clamp Attachment Detail.
- 5) Attach barriers to upper and lower panels using 3/8" x 7/8" BHCS w/pin and 3/8" SAE flat washers, as shown.
- 6) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 7) Install protective surfacing before users are allowed to play on the structure.

PLAN VIEW/FOOTING LAYOUTS

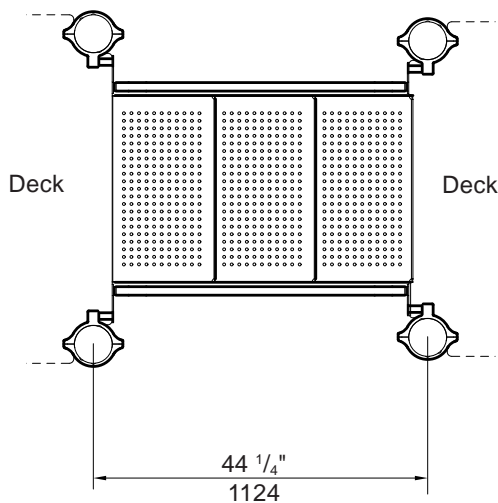
FOOTINGS/ 1-STEP



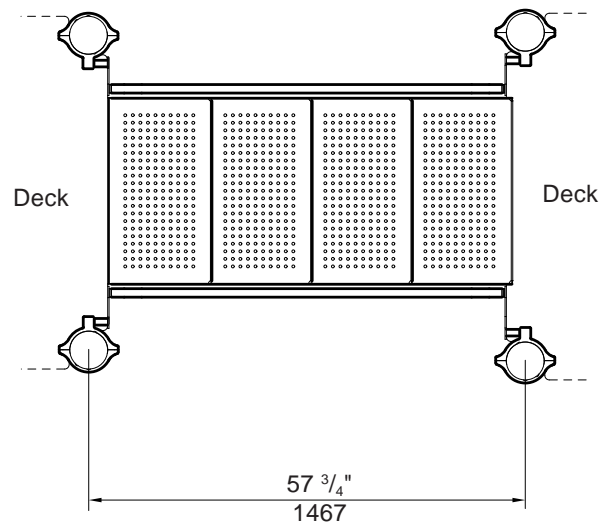
FOOTINGS/ 2-STEP

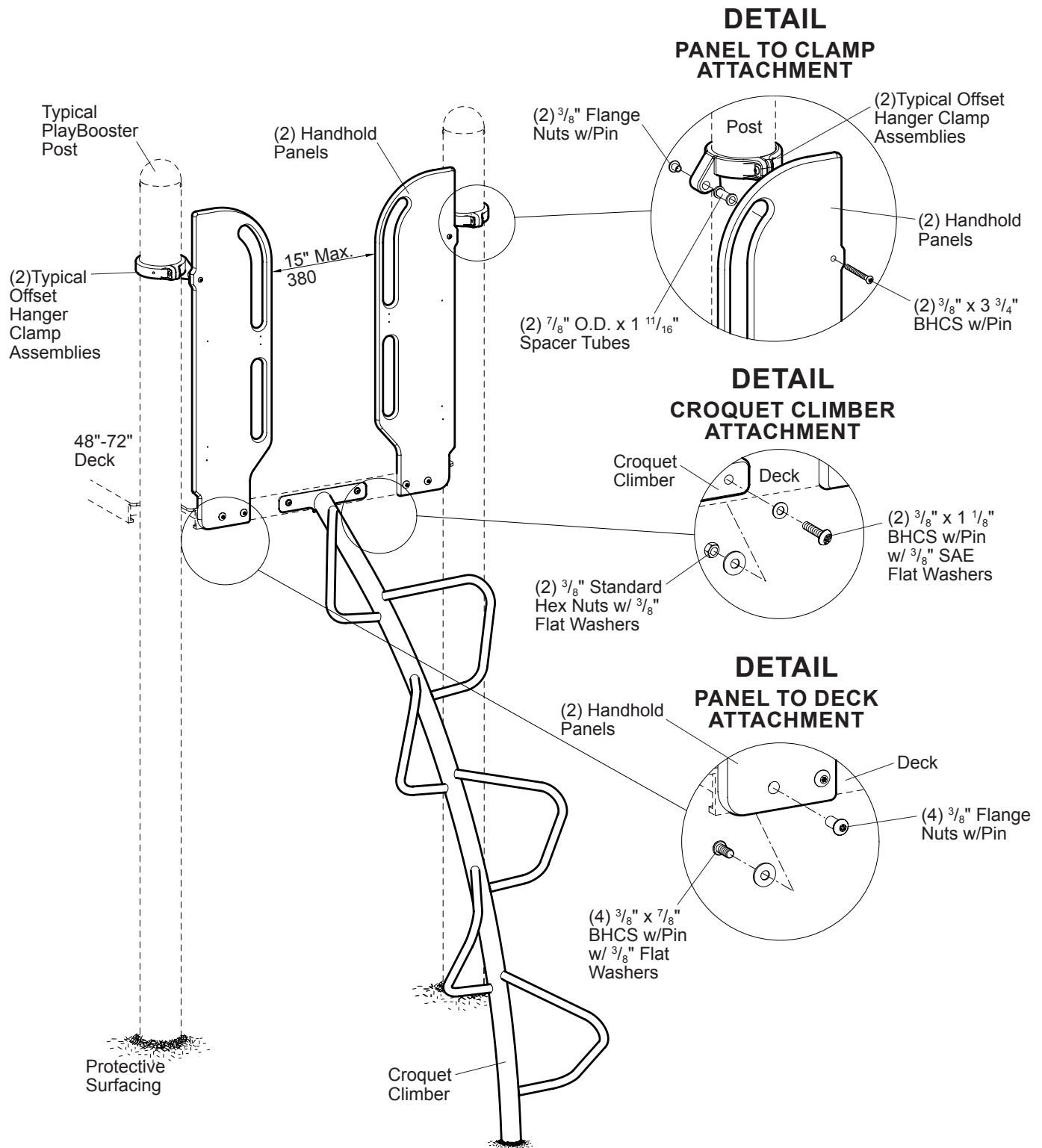


FOOTINGS/ 3-STEP



FOOTINGS/ 4-STEP





PlayBooster® 176077 Croquet Climber, 48"-72" Deck

Sheet 1 of 2

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Document #17608200

Parts List

Part#	Description	Qty.
100610	1/4" x 5/8" Drive Rivet, AL/SST	2
105327	5" Half Clamp, Specify Color	2
113468	7/8" O.D. x 1 11/16" Spacer Tube, Specify Color.....	2
113729	5" Offset Hanger Clamp, Specify Color.....	2
139563	Handhold Panel, Specify Color	2
176202	48"-56" Croquet Climber, DB, Specify Color.....	1
175792	64"-72" Croquet Climber, DB, Specify Color.....	1
176111	48" Croquet Climber, SM, Specify Color	1
176112	56" Croquet Climber, SM, Specify Color	1
176113	64" Croquet Climber, SM, Specify Color	1
176114	72" Croquet Climber, SM, Specify Color	1
176385	Croquet Climber Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	6
100327	3/8" Standard Hex Nut, SST	2
100351	3/8" Tee Nut, SST.....	4
100353	3/8" Flange Nut w/Pin, SST	6
100362	3/8" Flat Washers, SST.....	6
100365	3/8" SAE Flat Washers, SST.....	2
124460	3/8" x 3 3/4" BHCS w/Pin, SST	2
111392	2-Hole (SM) Hardware Package	1
100266	1/2" x 2 3/4" Expansion Anchors.....	2
100322	1/2" Standard Hex Nut, SST	2
100363	1/2" Flat Washer, SST	2

DB = Direct Bury
SM = Surface Mount

Specifications

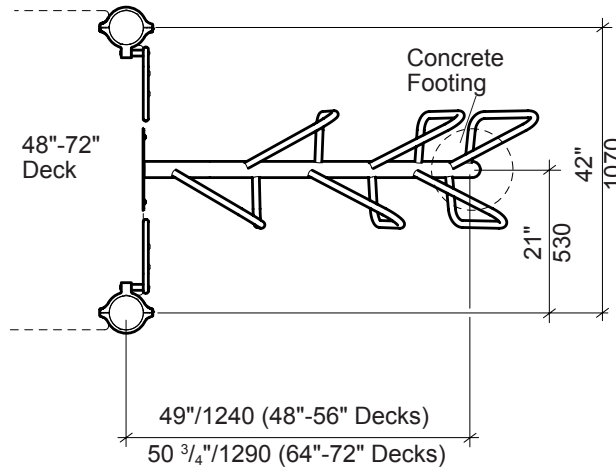
Croquet Climber:	Weldment comprised of 2.375" O.D. RS20 (.095"-.105" wall) galvanized steel tube, 1.029" O.D. RS20 (.070"-.080" wall) galvanized steel tube, and 1/4" HRPO steel sheet. Finish: ProShield®, color specified.
Handhold Panel:	Permalene®, color specified.
Spacer Tube:	Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.
Clamps:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	SM - Approx. 1 1/2 man hours DB - Approx. 2 man hours
Concrete:	DB - Approx. 1.31 cu. ft.
Weight:	DB 65 lbs. (48"-56") DB 68 lbs. (64"-72") SM 57 lbs. (48") SM 58 lbs. (56") SM 63 lbs. (64") SM 64 lbs. (72")
Fall Height:	Deck Height

Installation Instructions

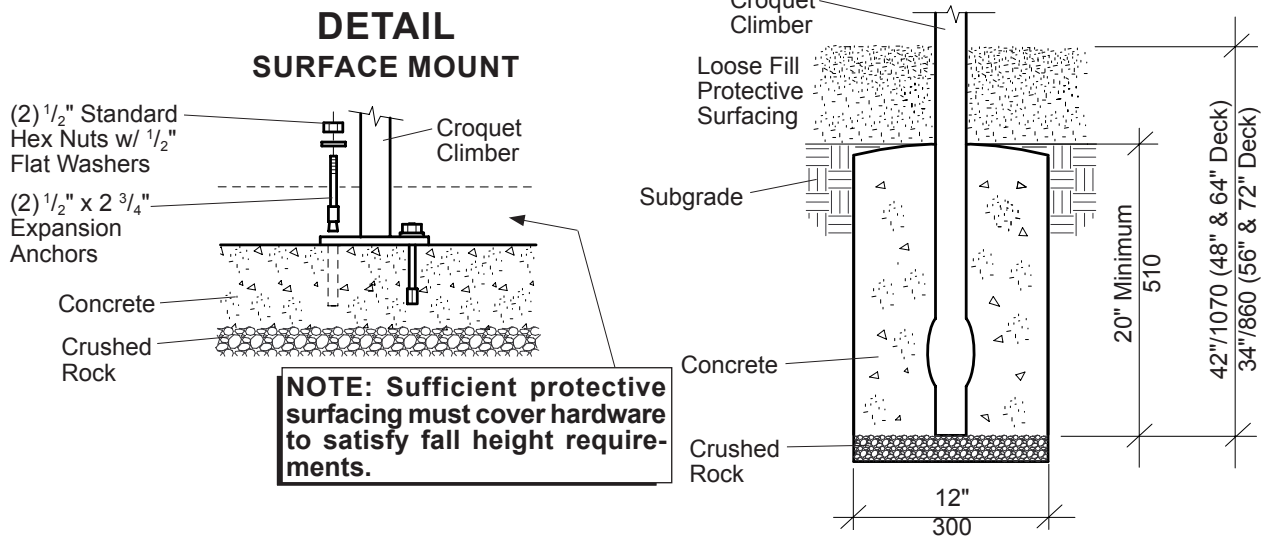
- 1) **(Direct Bury)** Dig footing hole spaced as shown.
- 2) Attach the handhold panels to the face of the deck, using 3/8" x 7/8" BHCS w/pin with 3/8" flat washers and 3/8" flange nuts w/pin.
- 3) Attach handhold panels to the offset hanger clamps, using 3/8" x 3 3/4" BHCS w/pin, 7/8" O.D. x 1 11/16" spacer tubes and 3/8" flange nuts w/pin. Refer to the Panel Attachment Detail.
- 4) Attach offset hanger clamps to posts, using 5" half clamps, 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 5) Attach Croquet climber to deck, using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" flat washers.
- 6) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Drill through hole in 5" half clamp and into 5" post with a 1/4" or "F" (only) drill bit, insert drive rivet into hole through clamp and into post. Hammer drive rivet pin in until flush with head. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 7) **(Direct Bury)** With Croquet climber plumb, pour concrete footing. Allow concrete footing to cure for a minimum of 72 hours before users are allowed to play on the structure.

(Surface Mount) With Croquet climber plumb, drill 1/2" x 3" deep holes through mounting plates using hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Fasten mounting plates to expansion anchors, using 1/2" standard hex nuts with 1/2" flat washers.
- 8) Install protective surfacing before users are allowed to play on the component.

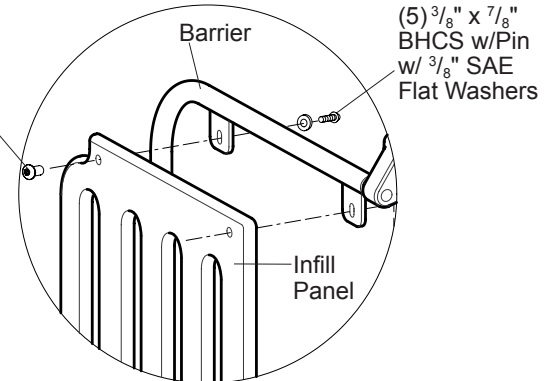
PLAN VIEW/FOOTING LAYOUT



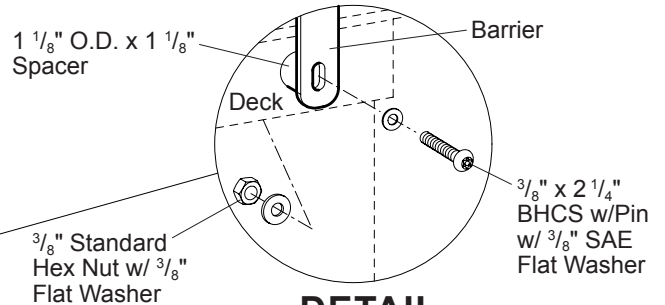
DETAIL DIRECT BURY



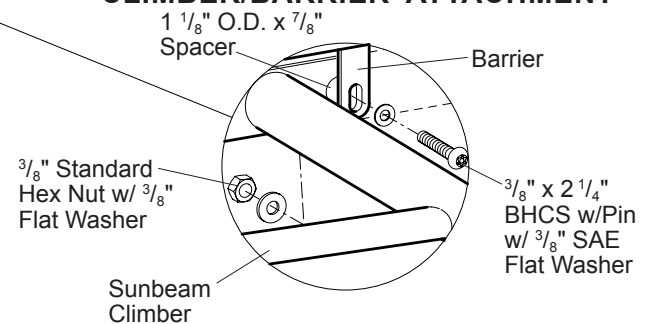
**DETAIL
INFILL PANEL ATTACHMENT**



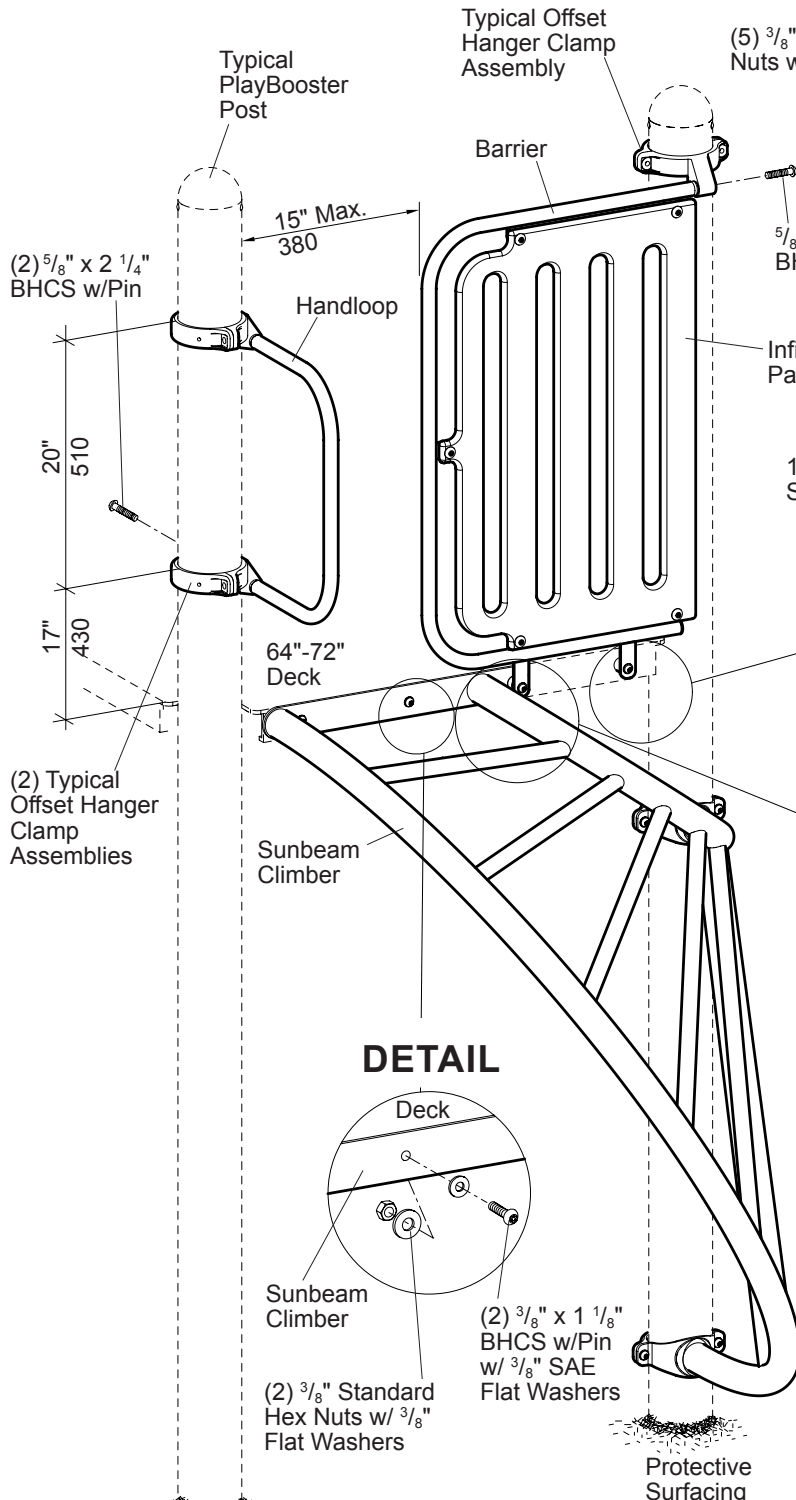
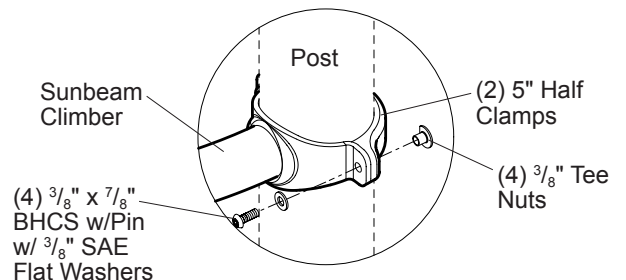
**DETAIL
BARRIER ATTACHMENT**



**DETAIL
CLIMBER/BARRIER ATTACHMENT**



**DETAIL
CLIMBER TO POST ATTACHMENT**



PlayBooster® 176079 Sunbeam Climber, 64\"-72\" Deck

601 7TH STREET SOUTH, DELANO, MINNESOTA 55328-8605 888-574-4678 LSI Install Help 888-438-6574 LSI Direct 763-972-5200 Int. FAX (763) 972-3185

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Document #17608600

Parts List

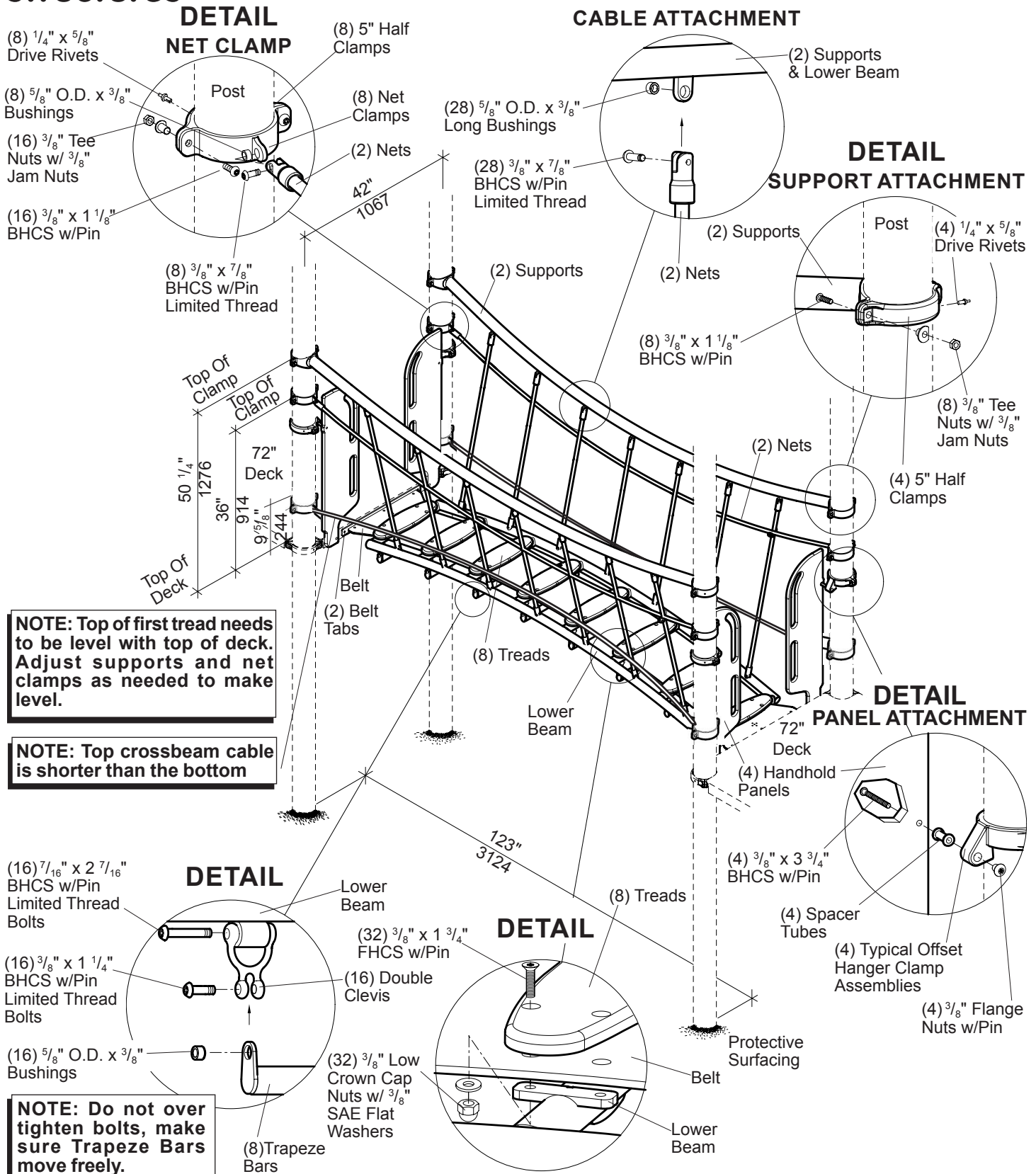
Part#	Description	Qty.
100610	1/4" x 5/8" Drive Rivet, AL/SST	5
105327	5" Half Clamp, Specify Color	5
108542	Handloop, Specify Color	1
113729	5" Offset Hanger Clamp, Specify Color	3
151072	1 1/8" O.D. x 1 1/8" Spacer, Specify Color	1
170930	Barrier, Specify Color	1
170931	Barrier Infill Panel, Specify Color	1
176050	Sunbeam Climber, Specify Color	1
176344	1 1/8" O.D. x 7/8" Spacer, Specify Color	1
176386	Sunbeam Climber Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	9
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100199	3/8" x 2 1/4" BHCS w/Pin, SST	2
100203	5/8" x 2 1/4" BHCS w/Pin, SST	3
100327	3/8" Standard Hex Nut, SST	4
100351	3/8" Mod T-Nut, SST	10
100353	3/8" Flange Nut w/Pin, SST	5
100362	3/8" Flat Washer, SST	14
100365	3/8" SAE Flat Washer, SST	13

Specifications

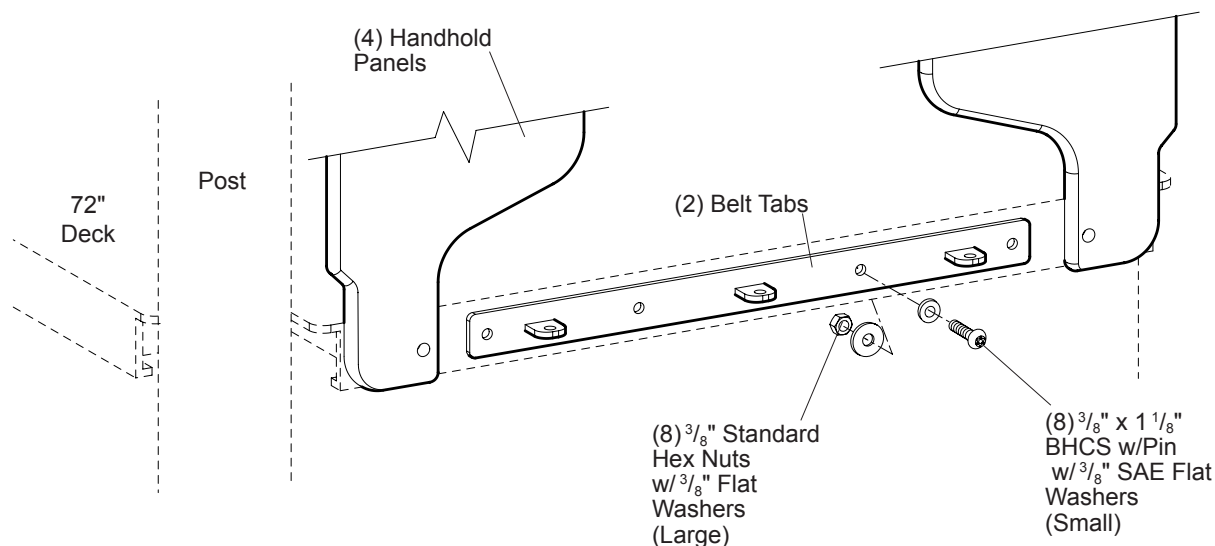
Sunbeam Climber:	Weldment comprised of 1.315" O.D. RS20 (.080"-.090" wall) galvanized steel tube, 2.375" O.D. RS40 (.130"-.140" wall) galvanized steel tube, and 1/4" HRPO steel sheet. Finish: ProShield®, color specified.
Barrier:	Weldment comprised of 1.125" O.D. 11 Ga. (.120") steel tube per ASTM A513 with 203 or 303 stainless steel threaded insert with 5/8" internal threads and 1/4" tabs. Finish: TenderTuff™, color specified.
Handloop:	Weldment comprised of 1.125" O.D. 11 GA (.120") steel tubing with 203 or 303 stainless steel inserts, with 5/8" internal threads. Finish: TenderTuff, color specified.
Infill Panel:	Permalene®, color specified.
Clamps:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	Approx. 1 1/4 man hours
Weight:	118 lbs.
Fall Height:	Deck Height

Installation Instructions

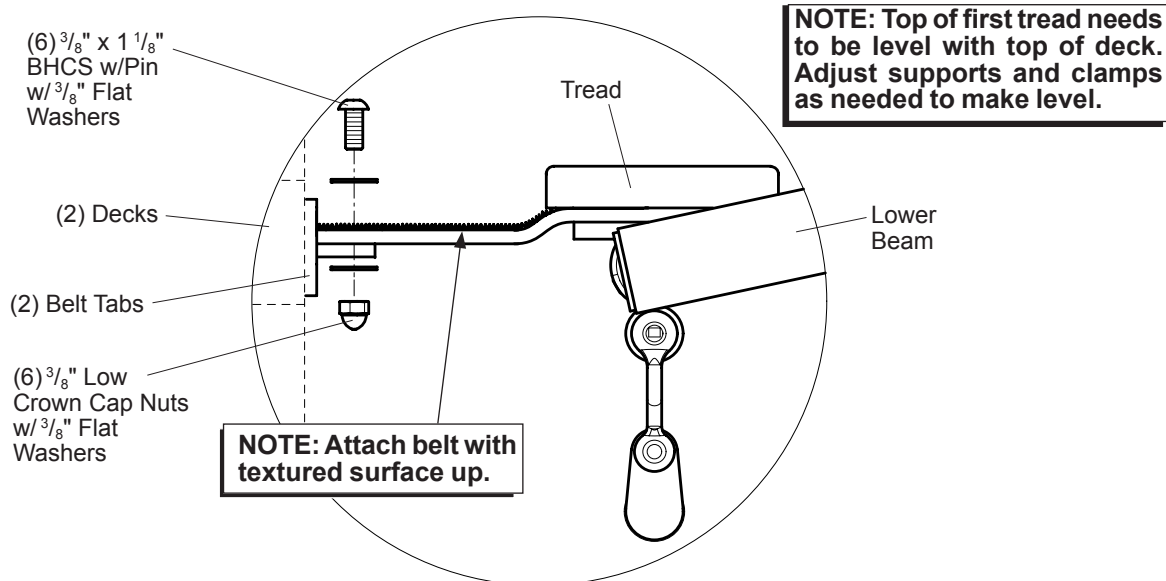
- 1) Attach Sunbeam climber to deck, using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" flat washers. Refer to Detail.
- 2) Attach Sunbeam climber to post, using 5" half clamps, 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" tee nuts. Refer to Climber To Post Attachment Detail.
- 3) Place 1 1/8" O.D. x 7/8" spacer between barrier tab and Sunbeam Climber. Attach barrier, 1 1/8" O.D. x 7/8" spacer and Sunbeam Climber to deck, using 3/8" x 2 1/4" BHCS w/pin with 3/8" SAE flat washer and 3/8" standard hex nut with 3/8" flat washer. Refer to the Climber/Barrier Attachment Detail.
- 4) Place 1 1/8" O.D. x 1 1/8" spacer between barrier tab and deck. Attach barrier and 1 1/8" O.D. x 1 1/8" spacer to deck, using 3/8" x 2 1/4" BHCS w/pin with 3/8" SAE flat washer and 3/8" standard hex nut with 3/8" flat washer. Refer to the Barrier Attachment Detail.
- 5) Attach barrier to offset hanger clamp, using 5/8" x 2 1/4" BHCS w/pin.
- 6) Attach infill panel to barrier, using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin. Refer to the Infill Panel Attachment Detail.
- 7) Mark locations for clamps on posts per dimensions on front of sheet. Attach offset hanger clamps to posts, using 5" half clamps, 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Assembly Sheet. Attach handloop to offset hanger clamp assemblies, using 5/8" x 2 1/4" BHCS w/pin.
- 8) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Drill through hole in 5" half clamp and into 5" post with a 1/4" or "F" (only) drill bit, insert drive rivet into hole through clamp and into post. Hammer drive rivet pin in until flush with head. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 9) Install protective surfacing before users are allowed to play on the structure.

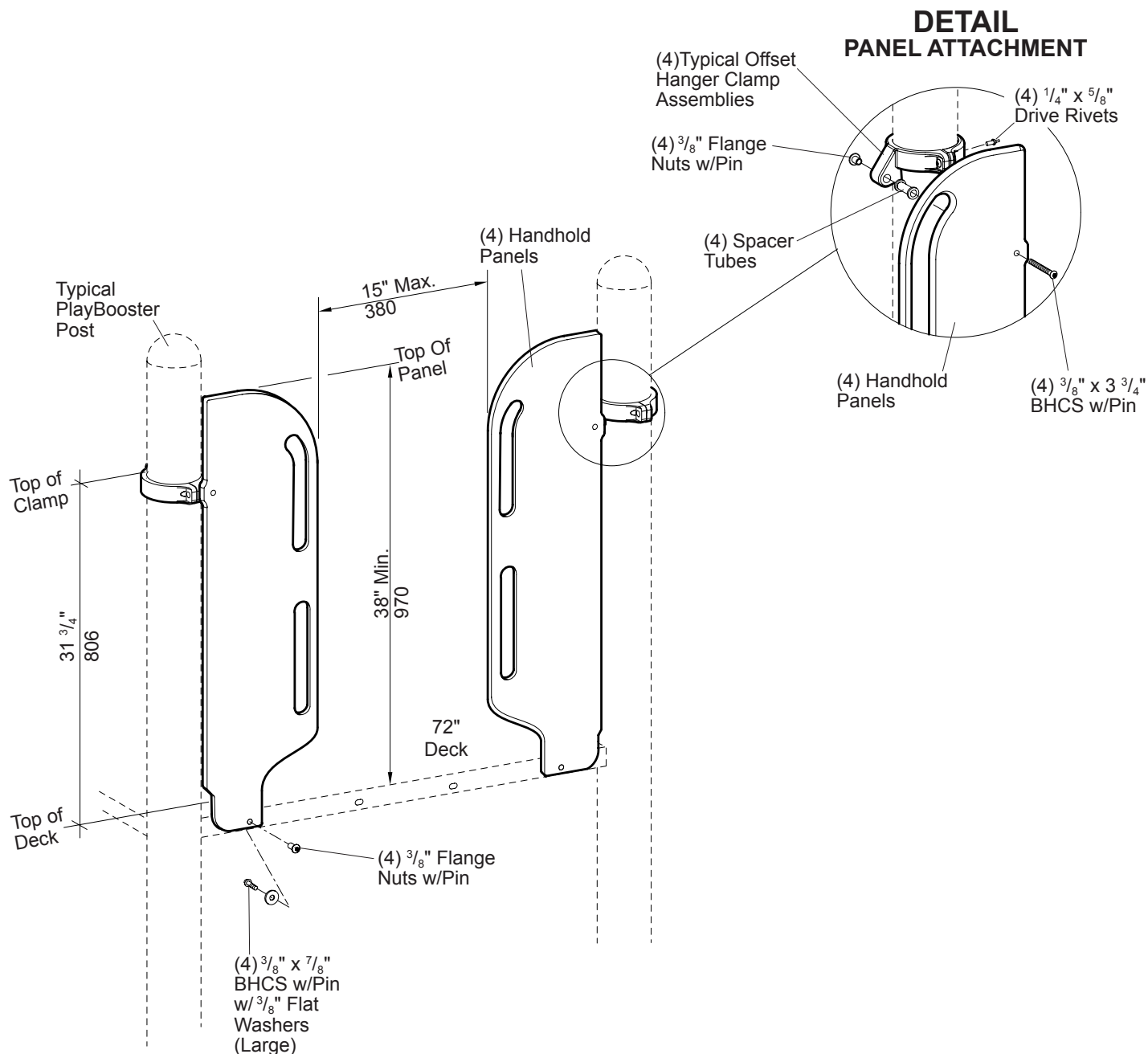


DETAIL BELT TAB ATTACHMENT

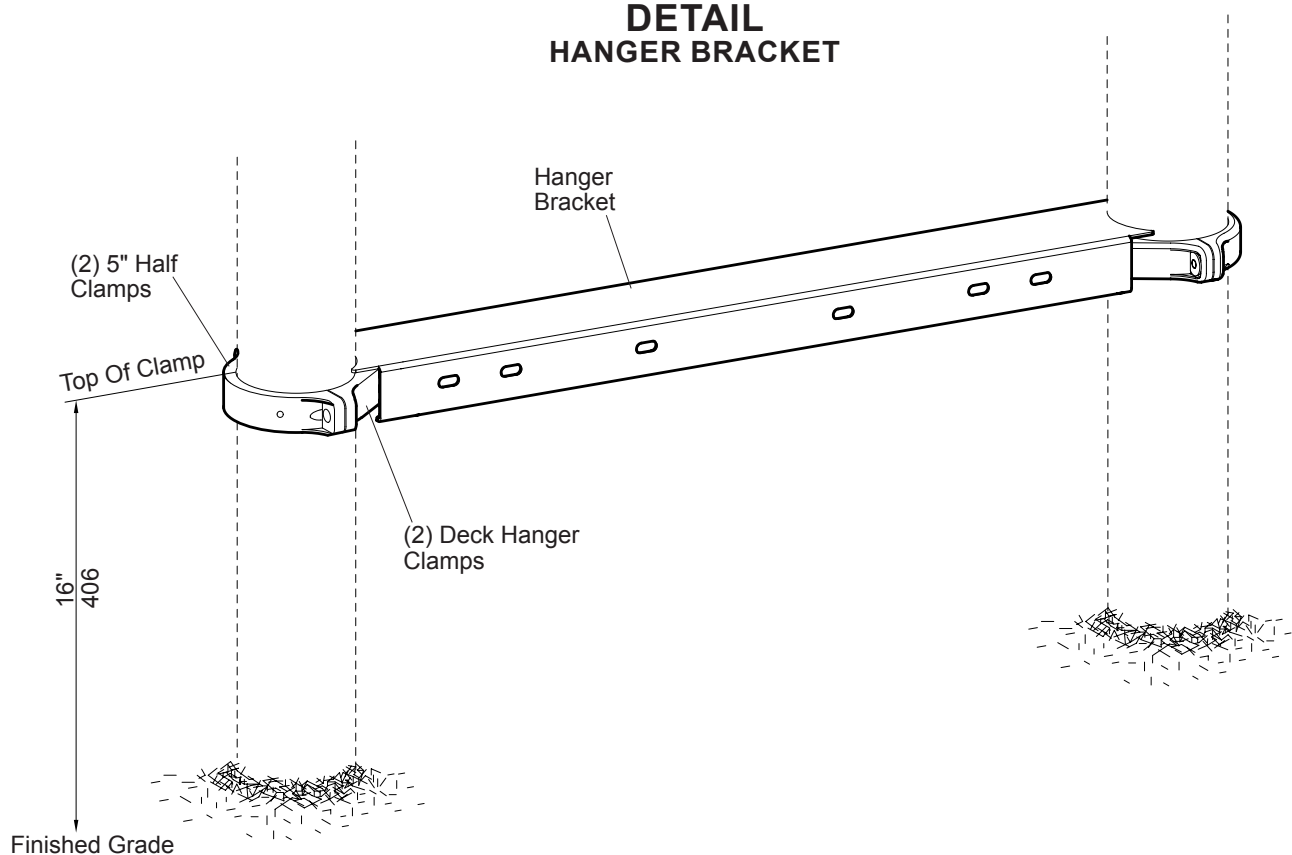


DETAIL BELT ATTACHMENT



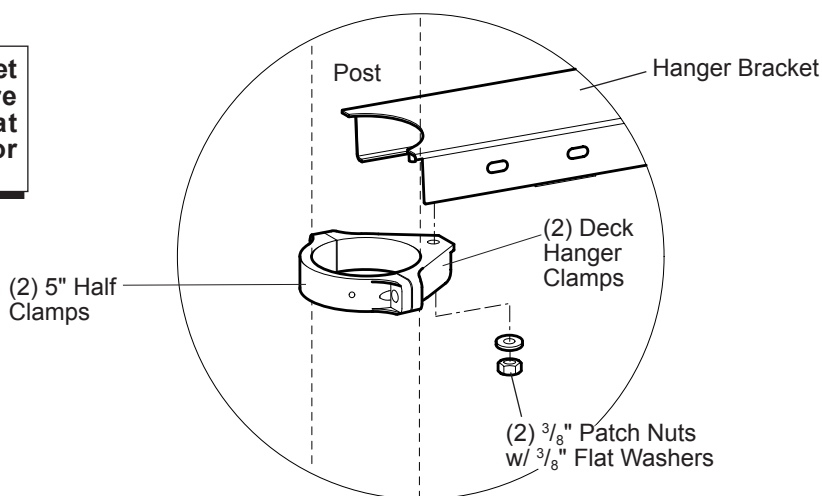


DETAIL HANGER BRACKET



DETAIL HANGER BRACKET ATTACHMENT

NOTE: A hanger bracket is required when there is not a lower deck at the end of the Travelor Climber.



Parts List

Part#	Description	Qty.
100610	1/4" x 5/8" Drive Rivet, AL./SST	16
105327	5" Half Clamp, Specify Color	*
113729	5" Offset Hanger Clamp, Specify Color	4
106022	Deck Hanger Clamp, Specify Color	*
113468	7/8" O.D. x 1 11/16" Tube, AL., Specify Color	4
144476	Handhold Panel, Specify Color	4
161898	Net Clamp, Specify Color	8
190911	Upper Support, Specify Color	2
237898	Net (Cable Assy.), Black, Specify Color	2
218936	Lower Beam, Specify Color	1
195007	Trapeze Bar, Specify Color	8
234001	Traveler Belt, Black	1
201971	Belt Tab, Specify Color	2
202034	GripX Tread, Black	8
184259	Hanger/Transition Bracket, Specify Color	*
242305	Traveler Climber Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	46
100256	3/8" x 1 3/4" FHCS w/Pin, SST	32
100290	3/8" x 7/8" BHCS w/Pin Limited Thread, SST	36
100292	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST	16
100349	3/8" Low Crown Cap Nut, SST	38
100351	3/8" Tee Nut, SST	32
100353	3/8" Flange Nut w/Pin, SST	8
100327	3/8" Standard Hex Nut, SST	8
100362	3/8" Flat Washer, SST	24
100365	3/8" SAE Flat Washer, SST	40
124460	3/8" x 3 3/4" BHCS w/Pin, SST	4
127068	7/16" x 2.438" BHCS w/Pin Limited Thread, SST	16
127179	5/8" O.D. x 3/8" Long Bushing, SST	52
138917	Double Clevis, SST	16
128296	3/8" Jam Nuts, SST	24
106676	Hanger Bracket Hardware Package	*
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100321	3/8" Hex Patch Nut, SST	2
100351	3/8" Tee Nut, SST	4
100362	3/8" Flat Washer, SST	2
100610	1/4" x 5/8" Drive Rivet, AL/SST	2

* = Quantity Determined By Your Order

Specifications

Lower Beam: Weldment comprised of 1.900 (48,26 mm) O.D. RS20 (.090"-.100") (2,29 mm-2,54 mm) galvanized steel tubing, 1.315 (33,40 mm) O.D. RS20 (.080"-.090") (2,03 mm-2,29 mm) galvanized steel tubing, 7 GA. (.179") (4,55 mm) HRPO steel sheet, 1/8" (3,18 mm) HRPO steel sheet and 3/8" (9,53 mm) thick HRPO steel sheet. SAE 841 dry bronze bushings are pressed into housings at factory. Finish: ProShield®, color specified.

Trapeze Bar: Weldment comprised of 1.315" (33,40 mm) O.D. RS20 (.080"-.090") (2,03 mm-2,29 mm) galvanized steel tubing and 7 GA. (.179") (4,55 mm) HRPO steel sheet. Finish: ProShield, color specified.

Cable Assembly: **(Cable)** Made of tightly woven polyester-wrapped, six-stranded galvanized-steel cable with a polypropylene core. **(Cable Connectors)** 6063-T6 aluminum.

Hanger Bracket: Formed from 11 GA (.120") (3,05 mm) HRPO low carbon sheet steel. Finish: TenderTuff, color specified.

GripX Tread: 3/4" (19,05 mm) Thick Permalene®, black in color.

Handhold Panel: Permalene®, color specified.

Support: Weldment comprised of 2.375" (60,33 mm) O.D. RS40 (.130" - .140") (3,30 mm-3,56 mm) wall galvanized steel tubing, 3/8" (9,53 mm) thick HRPO steel sheet, and 1/4" (6,35 mm) HRPO flat steel. Finish: ProShield, color specified.

Belt: .315" (8,00 mm) Thick mini rough top rubber belting with polyester fabric plys, black in color.

Belt Tab: Weldment comprised of 3/8" (9,53 mm) thick HRPO steel sheet, and 1/4" (6,35 mm) HRPO flat steel. Finish: ProShield, color specified.

Net Clamps: Weldment comprised of 1/4" (6,35 mm) x 1 3/4" (44,45 mm) HRPO flat steel and .375" (9,53 mm) stainless steel sheet. Finish: ProShield, color specified.

Clamp: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. 4 1/2 man hours

Area Req: 6' (1,83 m) minimum use zone

Weight: 309 lbs. No Hanger Brackets

330 lbs. w/1 Hanger Brackets

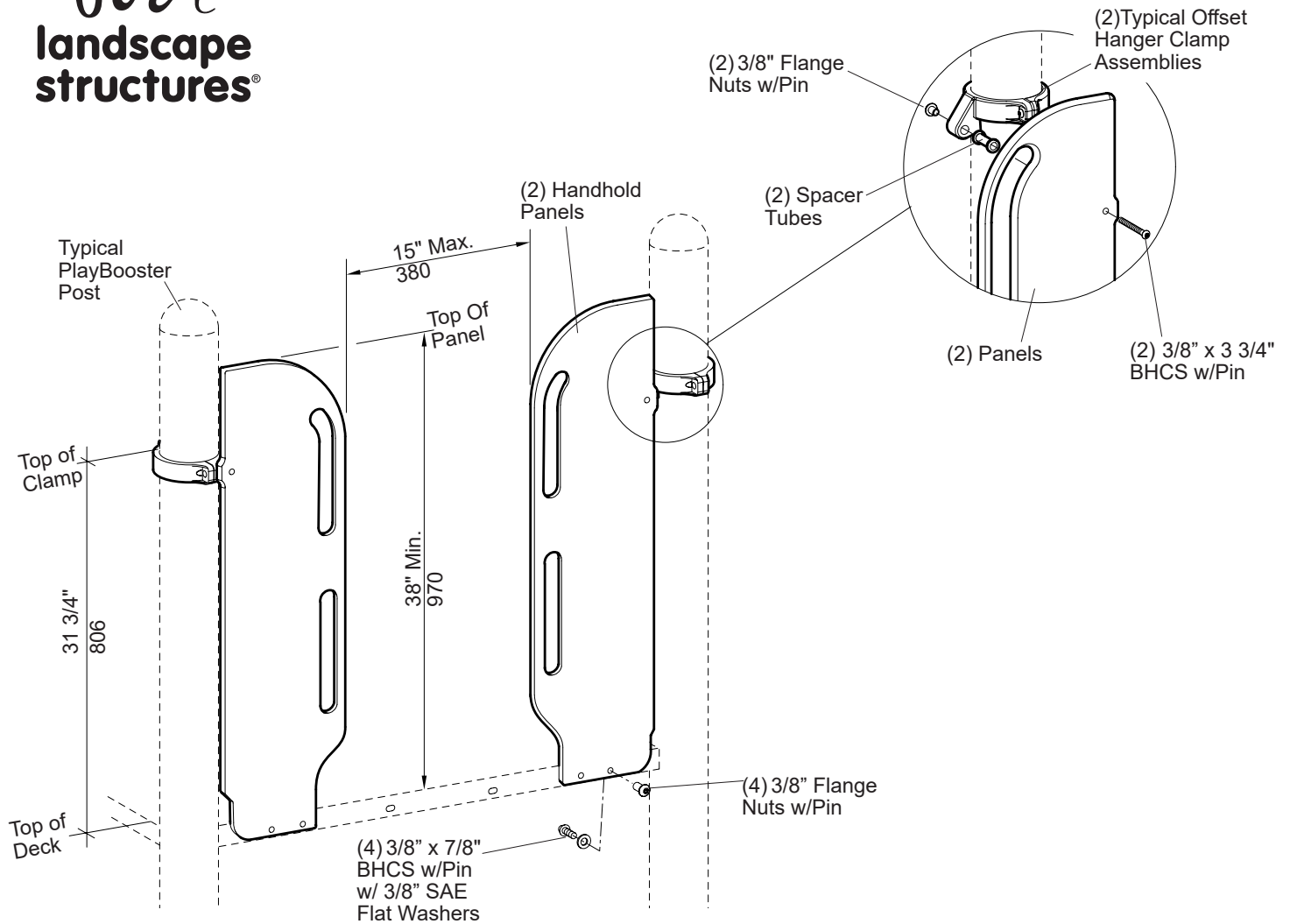
352 lbs. w/2 Hanger Brackets

Max. Fall Height: 79" (2,01 m)

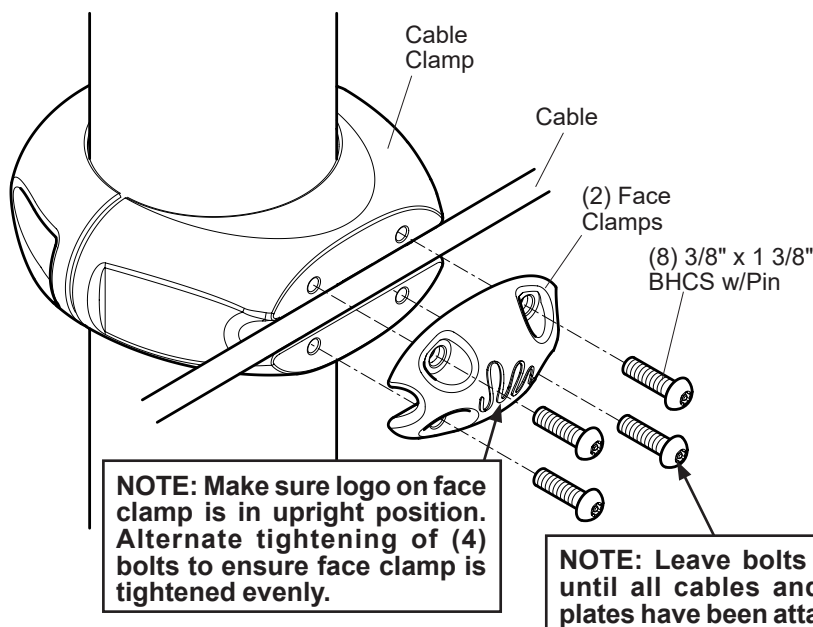
Installation Instructions

- 1) Attach belt tabs and handhold panels to decks. Refer to the Belt Tab Attachment Detail.
- 2) Attach offset hanger clamps to handhold panels. Refer to the Panel Attachment Detail.
- 3) Attach offset hanger clamps to posts, using 5" half clamps and $\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/pin with $\frac{3}{8}$ " tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
- 4) Lay beam on ground with bushings facing up. Position double clevis's over bushings and fasten with $\frac{7}{16}$ " x 2 $\frac{7}{16}$ " BHCS w/pin limited thread bolts. See Detail. **NOTE:** *Do not over tighten bolts.*
- 5) Attach trapeze bars to double clevis's as shown, using bushings and $\frac{3}{8}$ " x 1 $\frac{1}{4}$ " BHCS w/pin limited thread bolt. **NOTE:** *Do not over tighten bolts, make sure trapeze bars move freely.*
- 6) Turn lower beam over. Attach treads and belt to lower beam. Refer to Detail.
- 7) Attach supports and net clamps to posts at height shown. Refer to the Support and Net Clamp Attachment Details.
- 8) Attach nets to clamps and supports. Refer to the Cable and Net Clamp Attachment Details.
- 9) Attach lower beam to nets. Refer to Details. **NOTE:** *Top of first tread needs to be level with top of deck. Adjust supports as needed to make level.*
- 10) Attach belt to belt tabs and lower beam. Refer to the Belt Tab & Belt Attachment Details.
- 11) (If applicable - Hanger Bracket) Mark posts at 16" above finished grade. Attach deck hanger clamps to hanger bracket. Position hanger bracket with deck hanger clamps between posts level with marks. Attach to posts. Refer to the Hanger Bracket Attachment Detail. **NOTE:** *A hanger bracket is required when there is not a lower deck at the end of the Travelor Climber.*
- 12) Install $\frac{1}{4}$ " x $\frac{5}{8}$ " drive rivets in all 5" half clamps. Drill through hole in 5" half clamps and into 5" post with a $\frac{1}{4}$ " or "F" (only) drill bit, insert drive rivet in hole through clamp and into post. Hammer drive rivet pin in until flush with head. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 13) Install protective surfacing before users are allowed to play on the structure.

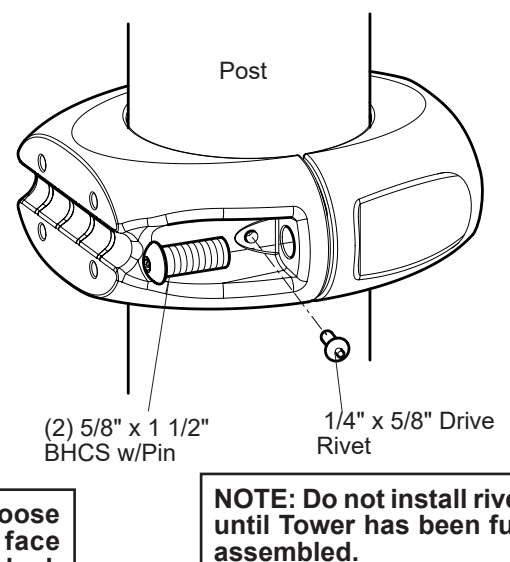
DETAIL PANEL ATTACHMENT



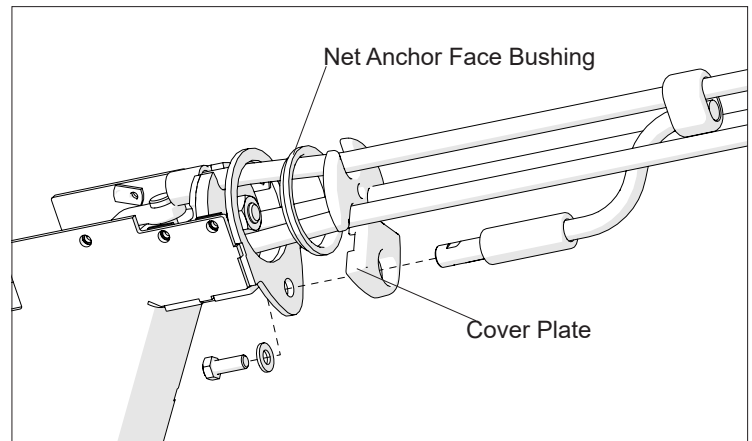
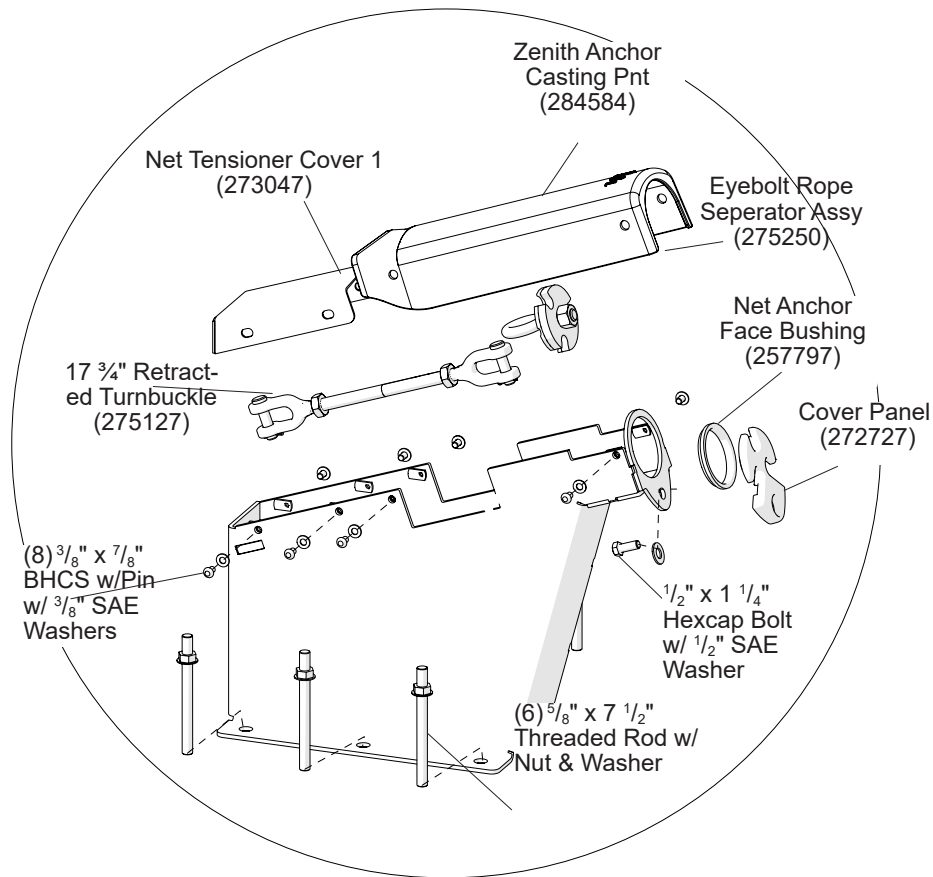
DETAIL FACE CLAMP ATTACHMENT

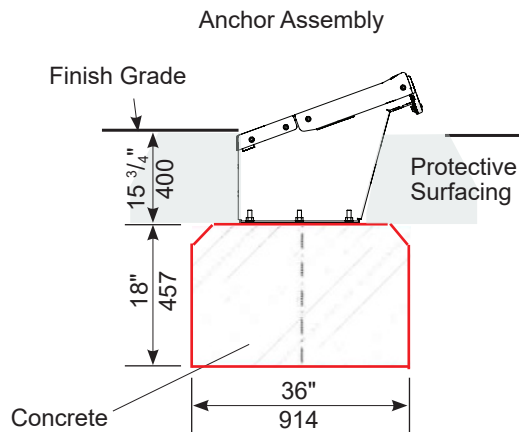


DETAIL TYPICAL CLAMP ATTACHMENT

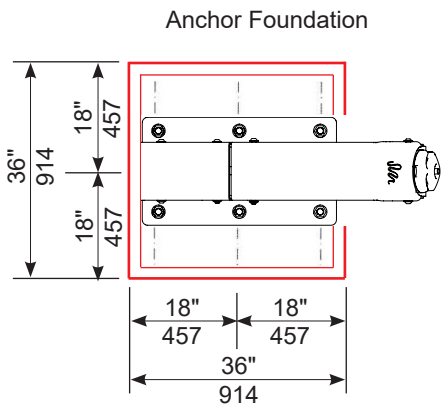


INSTALLING NET





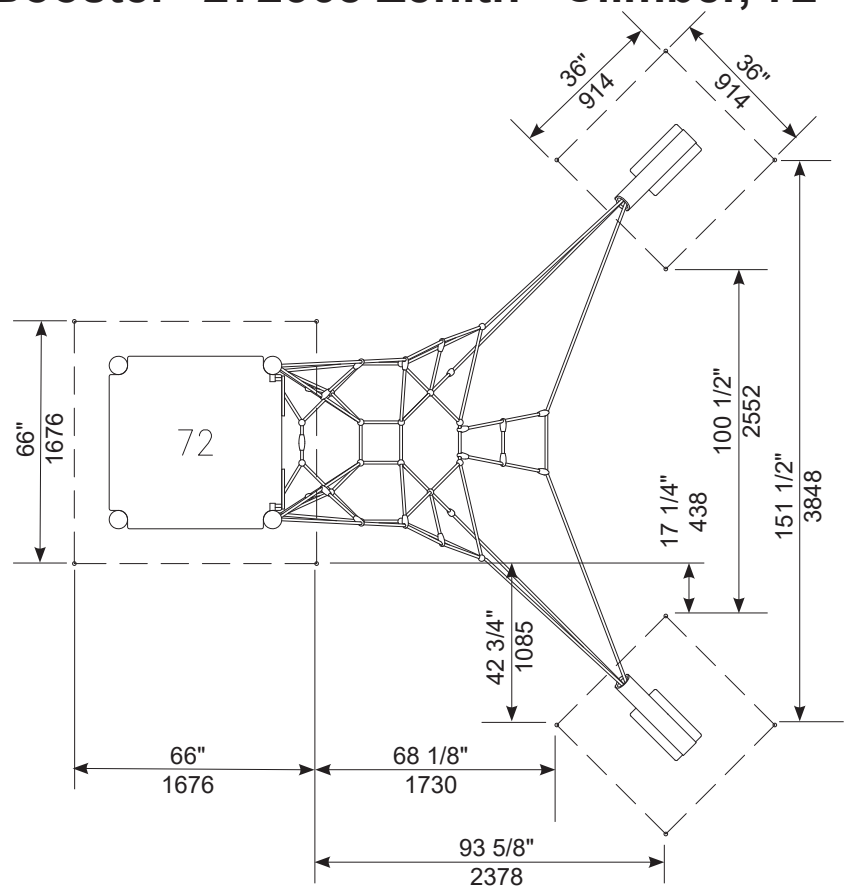
SECTION DRAWING



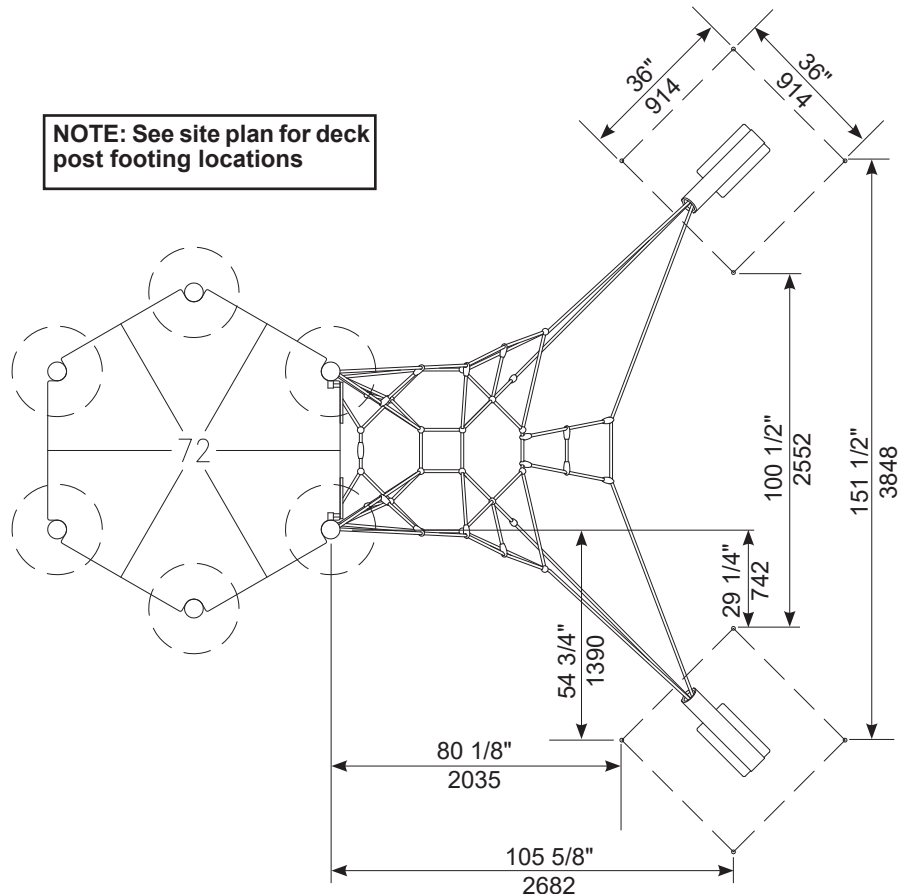
GROUND PLAN

Anchor Foundation

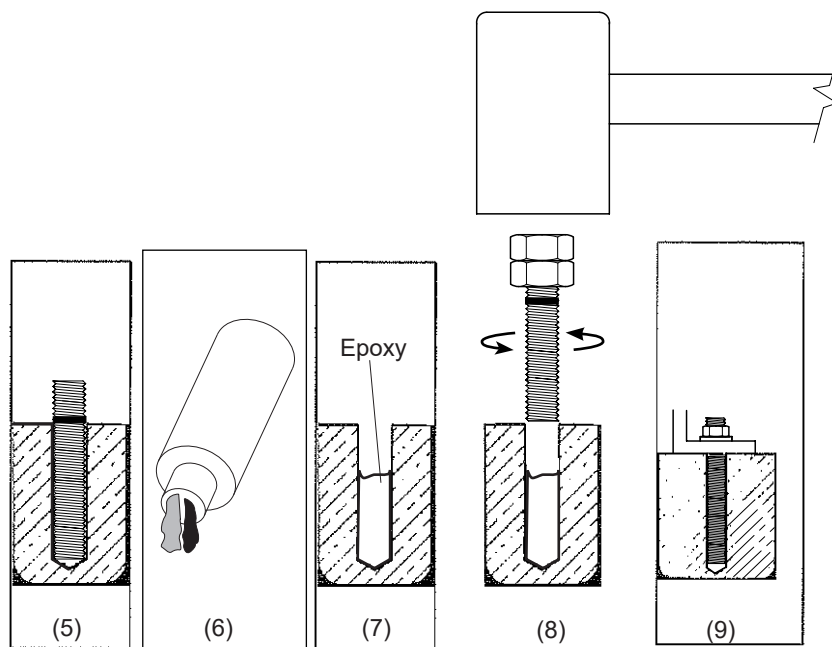
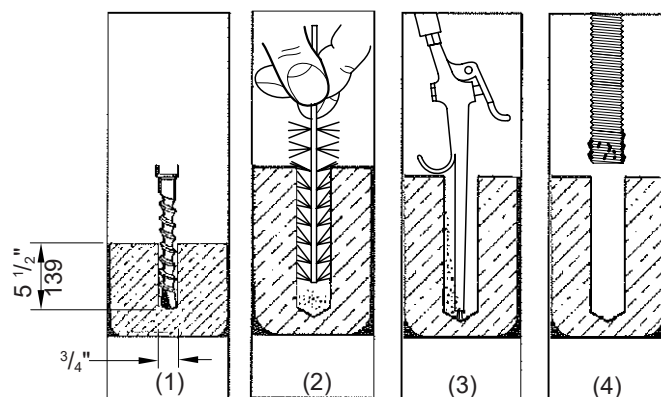
All bottom plates must be centered at foundation block!



NOTE: See site plan for deck post footing locations



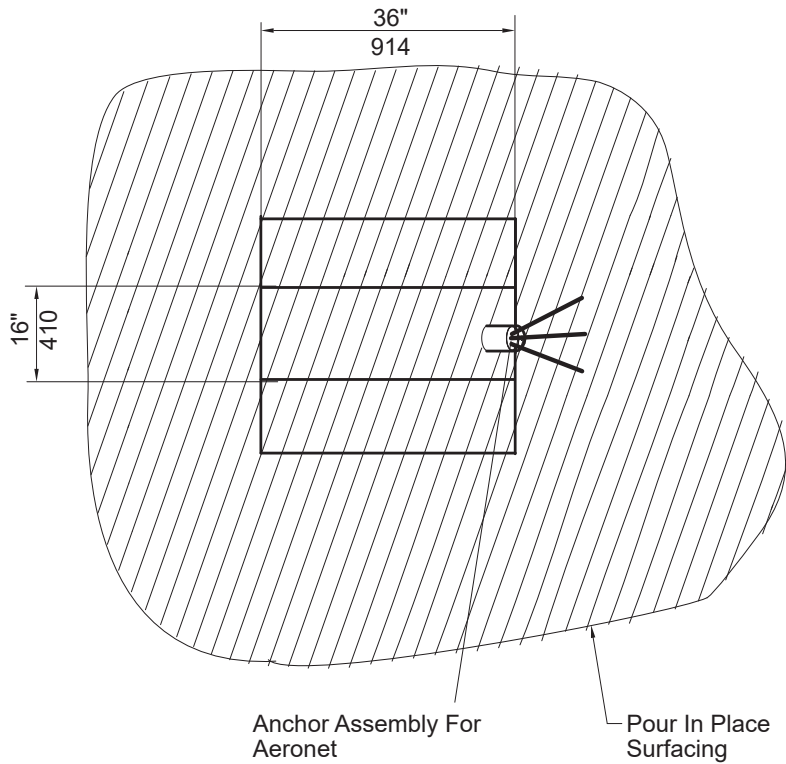
- 1) Surfaces should be clean and free of moisture, grease and oil.
- 2) Mark holes for anchor assemblies.
- 3) Using a $\frac{3}{4}$ " diameter drill bit, drill the holes to a depth of $5\frac{1}{2}$ " - $5\frac{3}{4}$ ". Drill the holes perpendicular to the work surface. To assure full holding power, do not ream the holes or allow the drill to wobble (1). Verify hole depth after drilling.
- 4) Clean the holes using oil free, dry compressed air and a wire or stiff nylon brush. Dust and debris left in holes will significantly reduce the holding capacity of the anchor; several repetitions of brushing and blowing are required to obtain a properly cleaned holes. Compressed air nozzle should reach the bottom of hole. (2 & 3).
- 5) Check hole with threaded rod to verify there is no dust in hole. Repeat wire brush and compressed air if necessary. (4)
- 6) Insert threaded rod in hole and mark rod. (5)
- 7) Cartridge Preparation. Remove the protective cap from the adhesive cartridge and insert the cartridge into the recommended dispensing tool. Before attaching mixing nozzle balance the cartridge by dispensing a small amount of material until both components are flowing evenly (6). Only after the cartridge has been balanced, screw on the proper Wej-It mixing nozzle to the cartridge. Dispense 10 to 12 inches of material from the mixing nozzle into a disposable container according to local regulations and prior to initial injection into the drill hole. The product should be a uniform gray color with no streaks. A new nozzle should be used with each new cartridge.
- 8) Insert epoxy into hole. (7)
- 9) Double nut threaded rod. Fill only one hole at a time, $\frac{2}{3}$ full. Insert rod into the hole while turning 1-2 rotations. Hammer threaded rod to bottom of hole. (8) **NOTE:** A 2 $\frac{1}{2}$ pound mallet may be needed.
- 10) Allow resin to cure for the specified time before loading threaded rods (9).
- 11) Attach anchor assemblies to threaded rod, using $\frac{5}{8}$ " standard hex nuts with $\frac{5}{8}$ " SAE flat washers.
- 12) Always wear safety glasses. Use only solid carbide tipped drill bits.



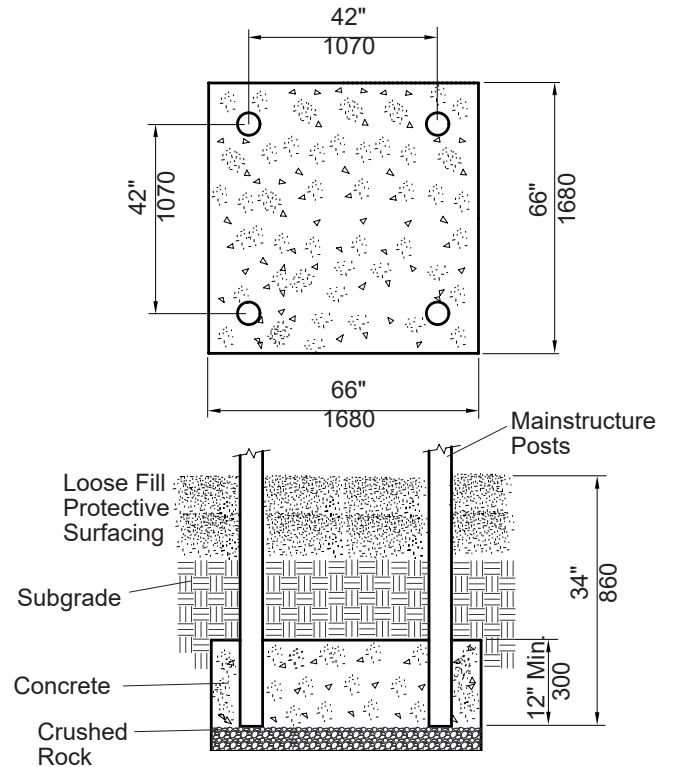
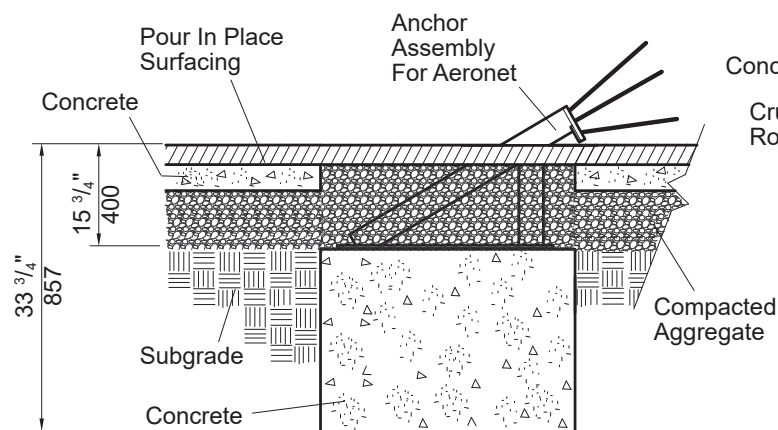
Inject-TITE AW Cure Schedule

Base Material Temperature Range °F (°C)	Working Time	Full Cure Time Dry Concrete	Full Cure Time Damp Concrete
15 (-9)	50 Min.	4 Hr.	8 Hr.
23 (-5)	40 Min.	3 Hr.	6 Hr.
41 (5)	20 Min.	90 Min.	3 Hr.
59 (15)	9 Min.	60 Min.	2 Hr.
77 (25)	5 Min.	30 Min.	60 Min.
95 (35)	3 Min.	20 Min.	40 Min.

PLAN VIEW OF INSTALLATION



Detail Plan For Foundation



NOTE: Refer to the DETAIL PLAN FOR FOUNDATION for footing dimensions.

Part#	Description	Qty.
100610	1/4" X 5/8" Drive Rivet, AL/SST	12
105327	5" Half Clamp, Specify Color	10
113729	5" Offset Hanger Clamp, Specify Color	2
113468	Tube 7/8" X 1 1/16" AL, Specify Color	2
139563	Handhold Panel, Specify Color	2
161898	Proprietary Net Clamp, Specify Color	8
195922	5" Cable Clamp, Specify Color	2
195942	5" Face Clamp, Specify Color	2
195943	5" Back Clamp, Specify Color	2
270436	3D Tube Net Brace, (Sq Deck) Specify Color	4
271828	3D Tube Net Brace, (Hex Deck) Specify Color	6
287673	Net Tensioner, SM HDG	2
284584	Zenith Anchor Metallic Silver	2
273047	Net Tensioner Cover 1	2
275127	3/4 -10, 17 3/4" Retracted Turnbuckle	2
275250	Eyebolt Rope Separator Assembly	2
257797	Net Anchor Face Bushing, Metallic Silver	2
272727	Cover Panel Aeronet, Metallic Silver	2
270011	3D Single Bay Net 72"DK, Specify Color	1
206894	Epoxy Cartridge	2
139551	Handhold (Tenderdeck) Hardware Package	1
124460	3/8" x 3 3/4" BHCS w/Pin, SST	2
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100351	3/8" Tee Nut, SST	4
100353	3/8" Flange Nut w/Pin, SST	6
100365	3/8" SAE Flat Washer, SST	4
275438	Square Deck Brace Hardware Package	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	16
100349	3/8" Low Crown Cap, SST	16
100365	3/8" SAE Flat Washer, SST	32
275441	Hex Deck Brace Hardware Package	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	24
100349	3/8" Low Crown Cap, SST	24
100365	3/8" SAE Flat Washer, SST	48
284601	Net Tensioner Hardware Package	2
100196	3/8" x 7/8" BHCS w/Pin, SST	8
100216	1/2" x 1 1/4" Hex Cap Bolt, SST	1
113550	1/2" SAE Flat Washer, SST	1
100365	3/8" SAE Flat Washer, SST	12
174022	5/8" x 7 1/2" Threaded Rod w/Nut Washer	6
275443	72" Net Climber Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	16
100351	3/8" Tee Nut, SST	16
100365	3/8" SAE Flat Washer, SST	16
100290	3/8" x 7/8" Limited Thread BHCS w/Pin, SST	8
127179	5/8" x 3/4" Bushing, SST	8
127551	5/8" x 1 1/2" BHCS, SST	4
113027	3/8" x 1 3/8" BHCS w/Pin, SST	8
175862	3/4" Justman Tube Brush	1

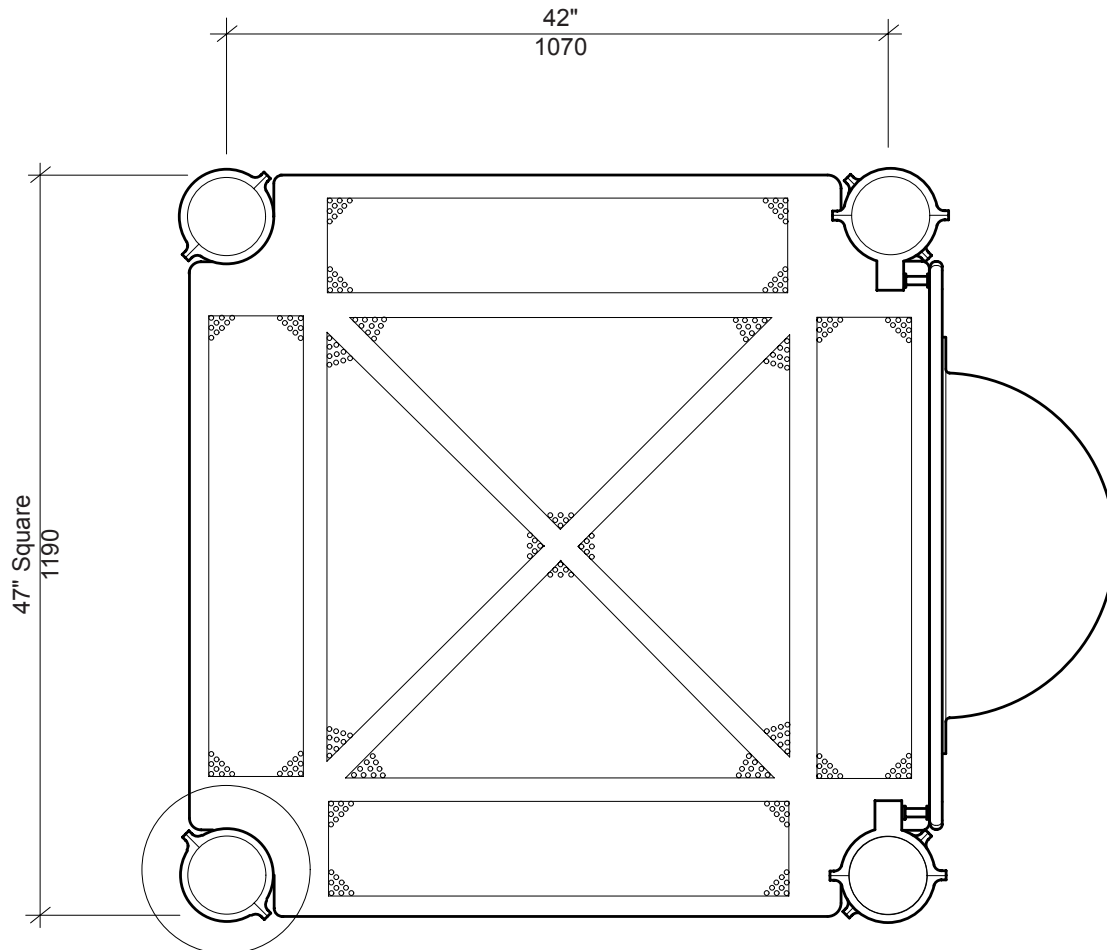
Specifications

Anchor Assembly:	Weldment comprised of 1/4" HRPO steel plate and 1/2" HRPO steel plate. Finish: Hot Dip Galvanized
Clamps:	Cast aluminum. Finish: ProShield, color specified.
Net:	Made of tightly woven, polyester-wrapped, six stranded galvanized-steel cable with a PVC wrapped steel core. 20 mm, steel-core interior rope and 20 mm, steel-core perimeter rope.
Casting cover:	Cast Aluminum. Finish: ProShield, Color specified
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Turnbuckle:	Clevis to Clevis Turnbuckle 3/4-10unc threads with 6" max adjustment. Finish: Forged Galvanized Steel Body.
Anchor Covers:	Comprised of 11ga (.1196) HRPO steel sheet. Finish: Hot Dip Galvanized
Eye Bolt Separator:	Weldment comprised of 1/4" SST plate, 1/2" SST plate, Eye Bolt Galvanized Steel and 3/4-10 thread SST hex Nut.
Net Clamps:	Weldment comprised of 1/4" (6,35 mm) x 1 3/4" (44,45 mm) HRPO flat steel and 3/8" (9,53 mm) Stainless steel sheet. Finish: ProShield, color specified
Brace:	Weldment comprised of 2.875 OD RS40 (.149-.182 wall) galvanized steel tubing and 1/4" x 3" wide steel clamp. Finish: ProShield, color specified.
Handhold Panel:	Permalene®, color specified
Installation Time:	Approx. 4 man hours (Square Deck) Approx. 4 man hours (Hex Deck)
Concrete Req.:	Approx. 87.2 cu. ft. (Square Deck) Approx. 131 cu. ft. (Hex Deck)
Weight:	378 lbs. (Square Deck option) 419 lbs. (Hex Deck option)
Fall Height:	Deck Height



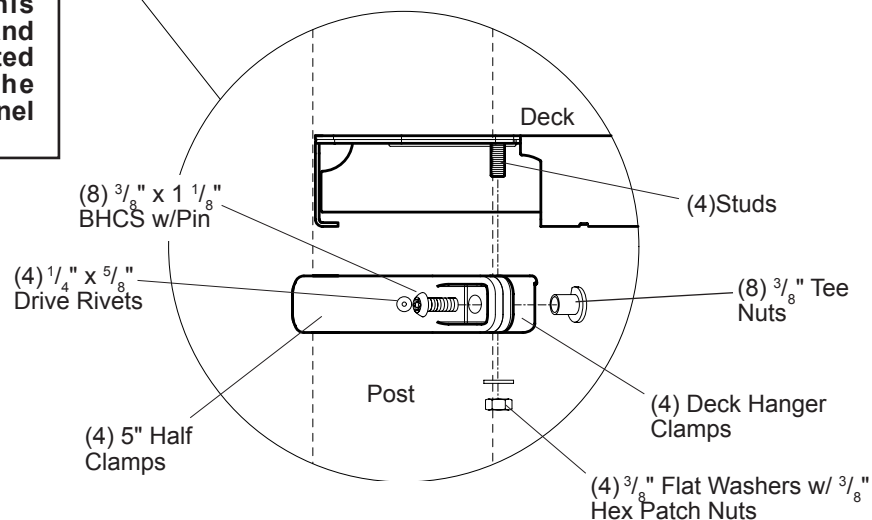
Installation Instructions

- 1) Dig Footing holes to depth and spacing as shown. (Refer to Deck Configurations) **Note:** Allow mainstructure and anchor concrete footings to cure for a minimum of 72 hours before attaching net.
- 2) Attach offset hanger clamp assembly to post at height shown, using 5" half clamp, 3/8 x 1 1/8 BHCS w/pin and 3/8" tee nuts. Refer to clamp attachment detail. **Note:** Angle inwards toward net at approx. 45 degree angle.
- 3) Attach steel net clamps to post at height shown, using 5" half clamps, 3/8" x 7/8" BHCS w/pin, 3/8" SAE flat washer and 3/8" tee nuts. Refer to Clamp attachment detail. **Note:** Angle inwards toward net at approx. 45 degree angle.
- 4) Attach net clamps to post at height shown, using cable clamp, back clamp and 5/8" x 1 1/2" BHCS w/pin. Refer to cable clamp attachment detail. **Note:** Angle inwards toward net at approx. 45 degree angle.
- 5) Attach braces to posts at height shown, using 3/8" x 1 1/8" BHCS w/pins, 3/8" SAE Flat washers and 3/8" low crown hex nuts. Refer to brace attachment detail.
- 6) Attach handhold panels to face of deck, using 3/8" x 7/8" BHCS w/pin, 3/8" SAE Flat washer and 3/8" flange nuts. Refer to Handhold Attachment Detail.
- 7) Attach handhold panel to offset clamps, using spacer tubes, 3/8" x 3/4" BHCS w/pin and 3/8" flange nuts. Refer to Handhold Attachment Detail



**DETAIL
DECK HANGER CLAMP**

NOTE: When using this deck, ALL enclosures and components are mounted on the OUTSIDE of the posts like the bubble panel shown above.



Parts List

Part#	Description	Qty.
145656	Tenderdeck, Specify Color	1
105327	5" Half Clamp, Specify Color	4
106022	5" Deck Hanger Clamp, Specify Color	4
119491	Hardware Package	1
100198	$\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/Pin, SST	8
100321	$\frac{3}{8}$ " Hex Patch Nut, SST	4
100351	$\frac{3}{8}$ " Tee Nut, SST	8
100362	$\frac{3}{8}$ " Flat Washer, SST	4
100610	$\frac{1}{4}$ " x $\frac{5}{8}$ " Drive Rivet, SST	4

Specifications

Square Deck: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with $\frac{5}{16}$ " diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 $\frac{5}{8}$ " x 47" x 47". Finish: TenderTuff™, color specified.

**Deck Hanger
Clamp Assembly:** Cast aluminum. Finish: ProShield®, color specified.

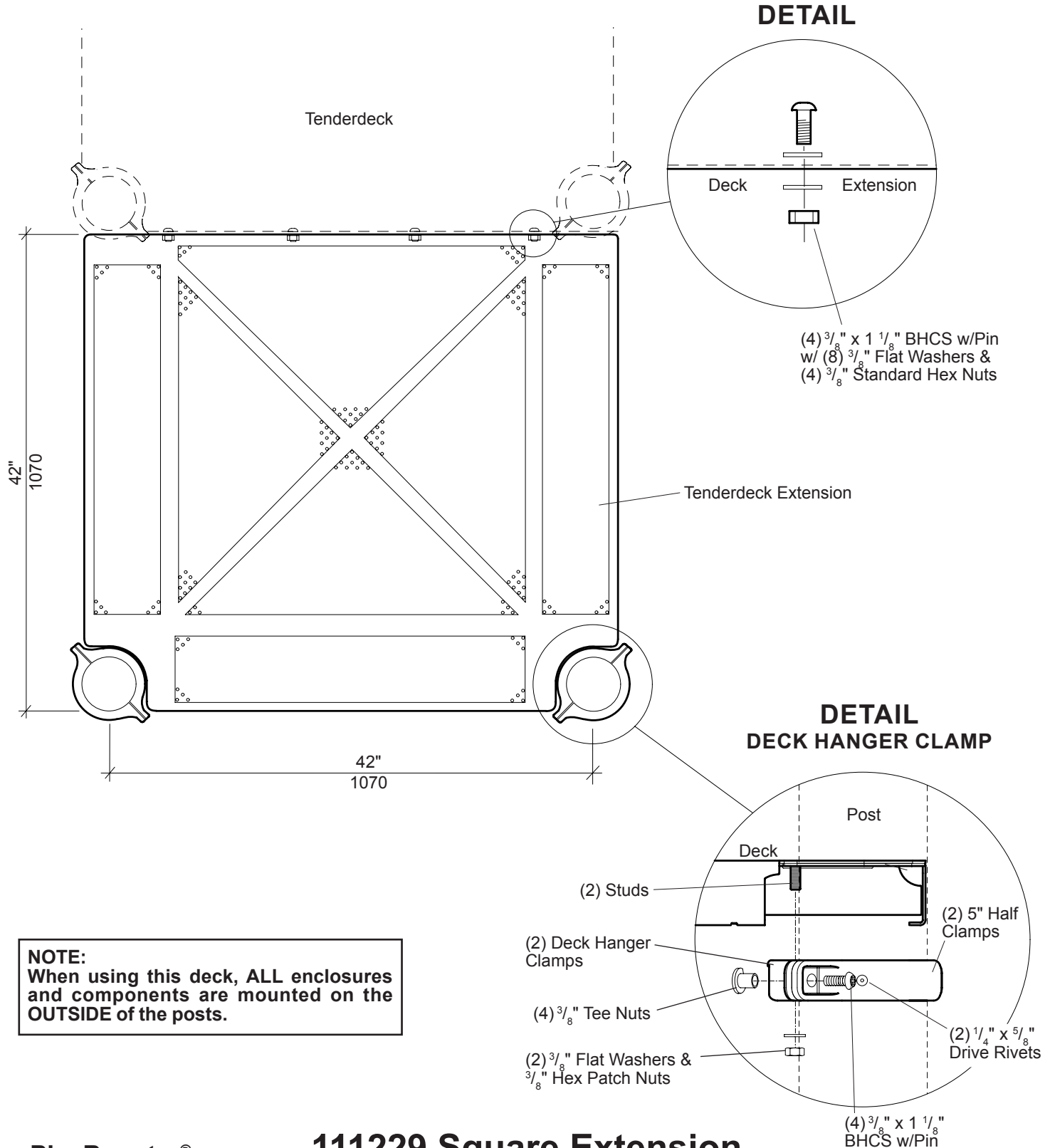
Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. 1 man hour

Weight: 119 lbs.

Installation Instructions

- 1) Mark posts for the appropriate height of the deck you are installing.
- 2) Fasten hanger clamps to marked position on posts. See Detail on front of sheet.
- 3) Lift deck into position, lining up studs underneath deck with deck hanger clamp as shown. Attach with $\frac{3}{8}$ " flat washers and $\frac{3}{8}$ " hex patch nuts.
- 4) Level deck and plumb posts. Install the drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 5) After all enclosures/components are installed, pour concrete footings per the Typical Concrete Footing Detail Sheet.
- 6) Install protective surfacing before users are allowed to play on the structure.



Parts List

Part#	Description	Qty.
145661	Square Deck Extension, Specify Color	1
105327	5" Half Clamp, Specify Color	2
106022	5" Deck Hanger Clamp, Specify Color	2
106556	Hardware Package	1
100198	$\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/Pin, SST	8
100327	$\frac{3}{8}$ " Standard Hex Nut, SST	4
100351	$\frac{3}{8}$ " Tee Nut, SST	4
100362	$\frac{3}{8}$ " Flat Washer, SST	10
100610	$\frac{1}{4}$ " x $\frac{5}{8}$ " Drive Rivet, AL/SST	2
100321	$\frac{3}{8}$ " Hex Patch Nut, SST	2

Specifications

Square Deck

Extension: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with $\frac{5}{16}$ " diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures $2\frac{5}{8}$ " x 42" x 47". Finish: TenderTuff™, color specified.

Deck Hanger

Clamp Assembly: Cast aluminum. Finish: ProShield®, color specified.

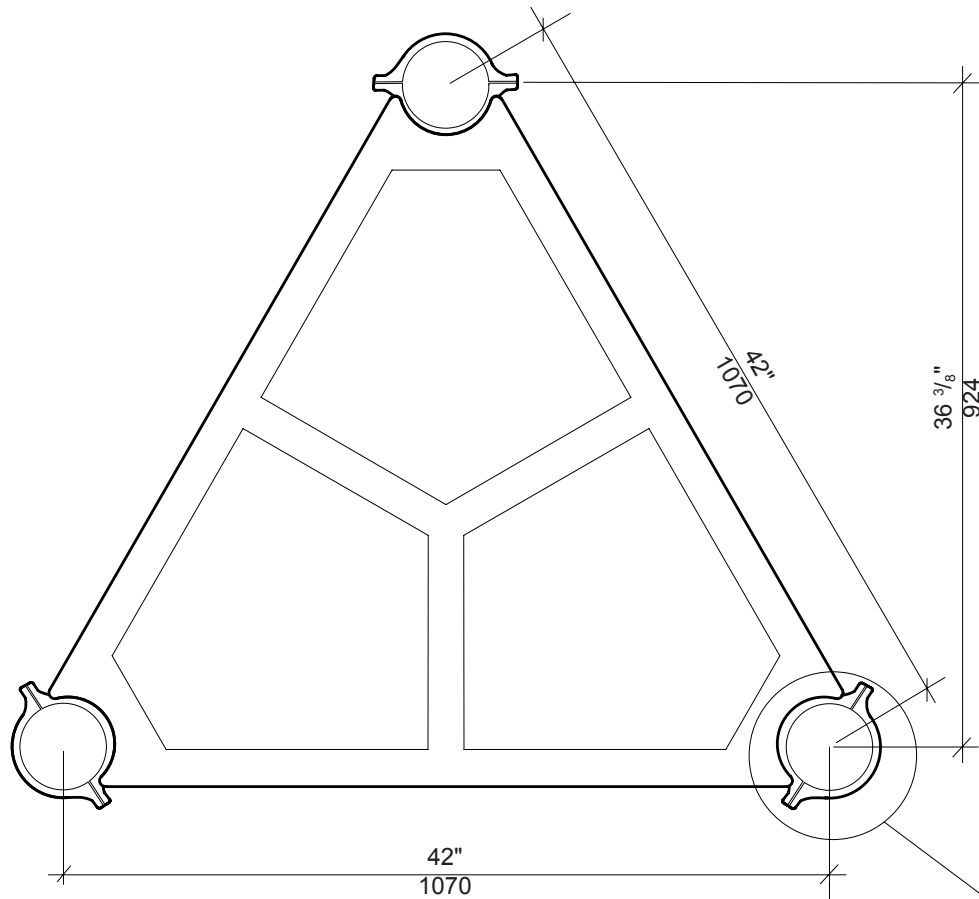
Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. 1 man hour

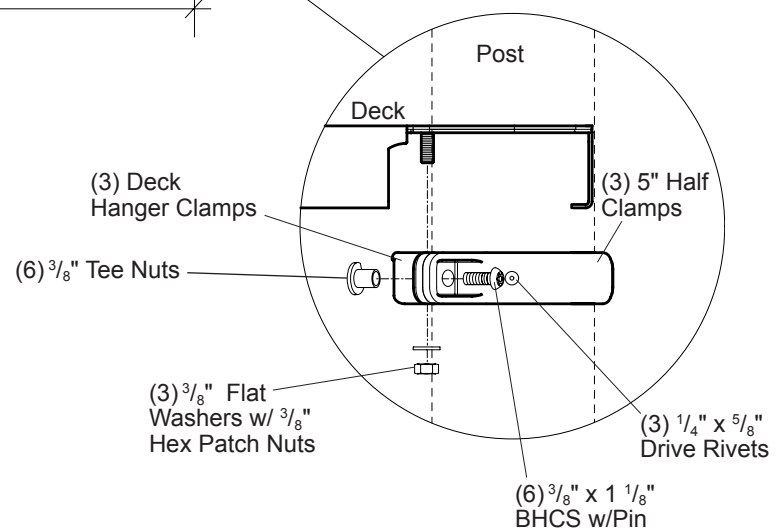
Weight: 106 lbs.

Installation Instructions

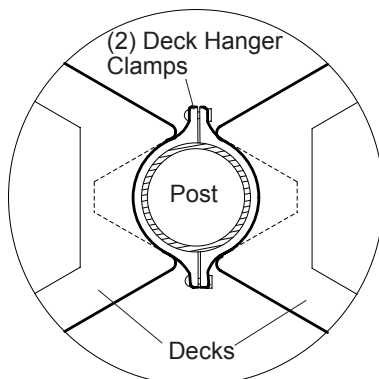
- 1) Mark posts for the appropriate height of the deck you are installing.
- 2) Fasten hanger clamps to marked position on posts. See Detail on front of sheet.
- 3) Lift deck into position, lining up studs underneath deck with deck hanger clamp as shown. Attach with $\frac{3}{8}$ " flat washers and $\frac{3}{8}$ " hex patch nuts.
- 4) Attach extension to tenderdeck using $\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/pin with $\frac{3}{8}$ " flat washers and $\frac{3}{8}$ " standard hex nuts.
- 5) Level deck and plumb posts. Install the $\frac{1}{4}$ " x $\frac{5}{8}$ " drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 6) After all enclosures/components are installed, pour concrete footings per the Typical Concrete Footing Spec Sheet.
- 7) Install protective surfacing before users are allowed to play on the structure.



**DETAIL
DECK HANGER CLAMP**



DETAIL



**Configuration
for Back to Back
Decks at Same
Height.**

PlayBooster®

111231 Triangular Tenderdeck

Parts List

Part#	Description	Qty.
145657	Tri-Deck, Specify Color.....	1
105327	5" Half Clamp, Specify Color.....	3
106022	Deck Hanger Clamp, Specify Color.....	3
120203	Triangular Deck Hardware Package	1
100198	$\frac{3}{8}$ " x 1 $\frac{1}{8}$ " BHCS w/Pin, SST.....	6
100321	$\frac{3}{8}$ " Hex Patch Nut, SST.....	3
100351	$\frac{3}{8}$ " Tee Nut, SST.....	6
100362	$\frac{3}{8}$ " Flat Washer, SST.....	3
100610	$\frac{1}{4}$ " x $\frac{5}{8}$ " Drive Rivet, AL/SST.....	3

Specifications

Triangular Deck: Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with $\frac{5}{16}$ " diameter holes. Deck face has (4) slotted holes for face mounting components. The finished size measures 2 $\frac{5}{8}$ " x 37 $\frac{3}{4}$ ". Finish: TenderTuff™, color specified.

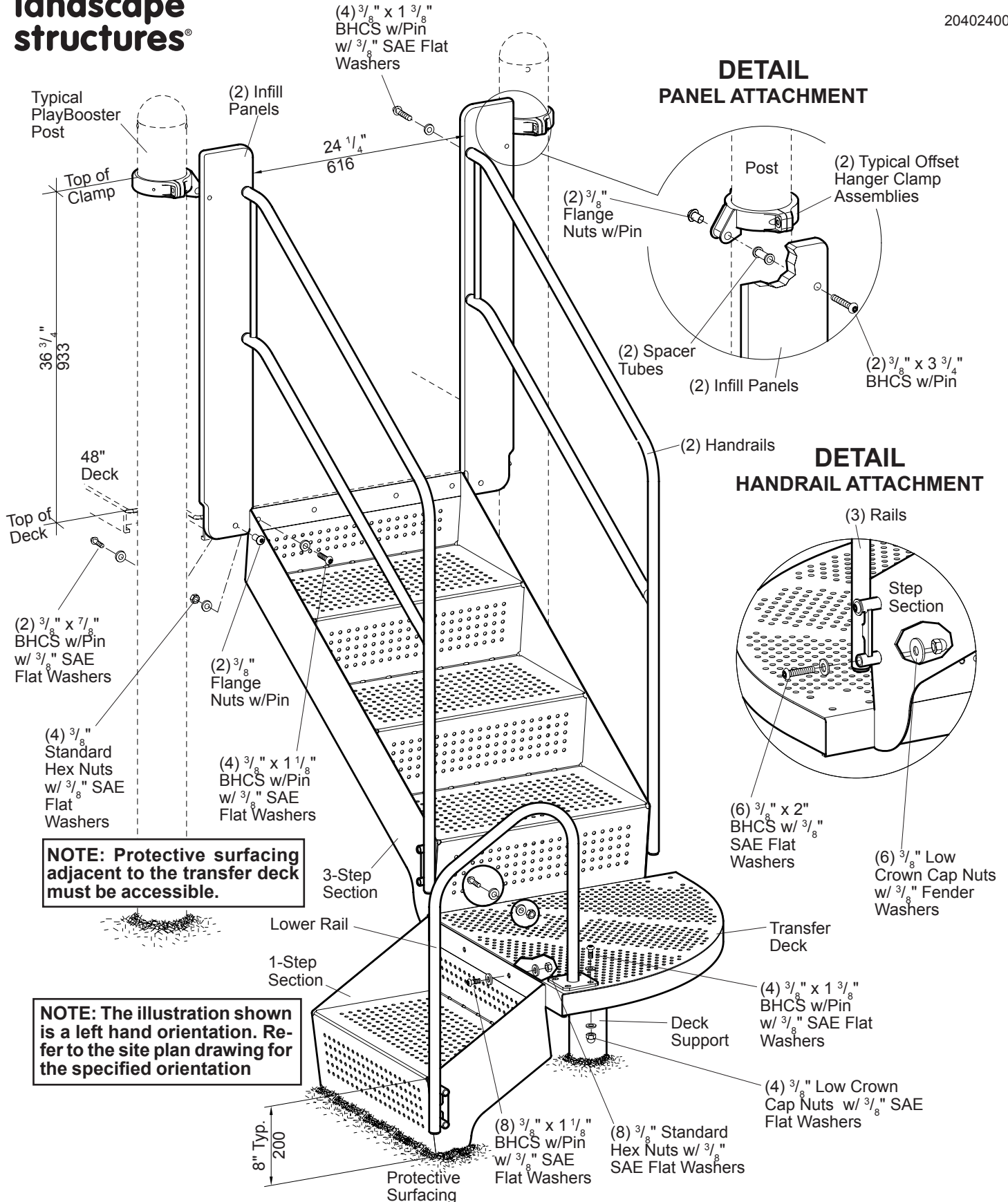
Deck Hanger Clamp Assembly: Cast aluminum. Finish: ProShield®, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. $\frac{1}{2}$ man hour
Weight: 61 lbs.

Installation Instructions

- 1) Mark posts for the appropriate height of the deck you are installing.
- 2) Fasten deck hanger clamps to marked position on posts. See Detail on the front of this sheet.
- 3) Lift deck assembly into position, lining up stud underneath deck with deck hanger clamp as shown. Attach using $\frac{3}{8}$ " hex patch nuts with $\frac{3}{8}$ " flat washers. With deck level and posts plumb, final tighten all hardware.
- 4) Install $\frac{1}{4}$ " x $\frac{5}{8}$ " drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 5) After attachment of enclosures and components is complete, pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.
- 6) Install protective surfacing before users are allowed to play on the structure.



PlayBooster® 152911 Transfer Module, 48", w/Handrails

Sheet 1 of 2

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Document #24445200



PlayBooster® 152911 Transfer Module, 48", w/Handrails

Parts List

Part#	Description	Qty.
100610	1/2" x 5/8" Drive Rivet, AL/SST	2
105327	5" Half Clamp, Specify Color	2
113468	7/8" O.D. x 1 11/16" Spacer Tube, Specify Color	2
113729	Offset Hanger Clamp, Specify Color	2
181371	Deck Support (DB), Specify Color	1
181373	Deck Support (SM), Specify Color	1
181374	Step Support (DB), Specify Color	1
181376	Step Support (SM), Specify Color	1
144696	1-Step Section, Specify Color	1
144700	3-Step Section, Specify Color	1
152640	3-Step Handrail, Specify Color	2
152641	Lower Rail, Specify Color	1
153398	Transfer Deck, Specify Color	1
153399	Infill Panel, Specify Color	2
204034	Transfer Module Hardware Package	1
100173	3/8" x 2" BHCS, SST	6
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	20
100327	3/8" Standard Hex Nut, SST	16
100351	3/8" Tee Nut, SST	4
100353	3/8" Flange Nut w/Pin, SST	4
100365	3/8" SAE Flat Washer, SST	54
113027	3/8" x 1 3/8" BHCS w/Pin, SST	8
124460	3/8" x 3 3/8" BHCS w/Pin, SST	2
100378	3/8" Fender Washer, SST	6
100349	3/8" Low Crown Cap Nut, SST	12
111393	4-Hole (SM) Hardware Package	1
100263	3/8" x 2 3/8" Expansion Anchors	4
100327	3/8" Standard Hex Nut, SST	4
100365	3/8" SAE Flat Washers, SST	4
121256	2-Hole (SM) Hardware Package	1
100263	3/8" x 2 3/8" Expansion Anchors	2
100327	3/8" Standard Hex Nut, SST	2
100365	3/8" SAE Flat Washers, SST	2

DB = Direct Bury
SM = Surface Mount

Specifications

Deck:	Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes and measures 29" per (2) sides. Finish: TenderTuff™, color specified.
Railings:	Weldment comprised of formed 1 1/2" O.D. x 11 GA (.120") steel tubing with 203 or 303 stainless steel inserts with 3/8" internal threads. Finish: TenderTuff, color specified.
Step Sections:	Formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is 24 3/8" wide x 14" deep and is perforated with 5/16" diameter holes. Finish: TenderTuff, color specified.
Spacer Tube:	Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield®, color specified.
Panel:	Solid color Permalene® panel, color specified.
Deck Support:	Weldment comprised of 3 1/2" O.D. RS20 (.125") galvanized steel tubing and 3/8" O.D. x 5" long rod. Finish: ProShield, color specified.
Step Support:	Weldment comprised of 1.660 O.D. RS20 (.080"-.095") and 1 3/4" x 1 3/4" x 1/8" HR angle. Finish: ProShield, color specified.
Clamps:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time:	SM - Approx. 3 man hours DB - Approx. 4 man hours
Concrete Req.:	Approx. 3.4 cu. ft.
Weight:	SM - 264 lbs. DB - 279 lbs.
Fall Height:	Deck Height

Installation Instructions

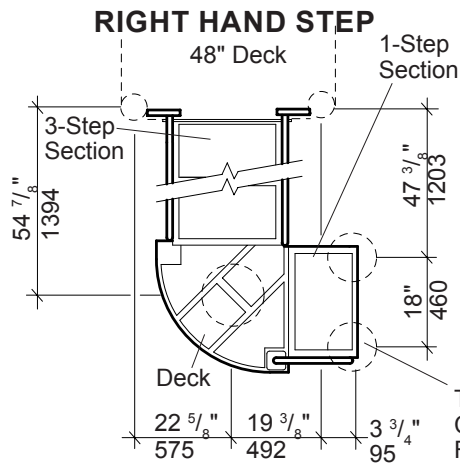
- (Direct Bury)** Dig footings as shown. Refer to your Plan View/Footing Layout.
 - Attach the deck support to the transfer deck using 3/8" x 7/8" BHCS w/pin and 3/8" low crown cap nuts with 3/8" SAE flat washers. **NOTE: Make sure 3/8" rod on support is under support strap on deck as shown.** Refer to the Deck Support Attachment Detail.
 - Attach the 3-step section to the transfer deck using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers.
 - Attach the 3-step section to the face of the mainstructure deck using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers.
 - Attach the step support to the 1 step section using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer to the Step Support Attachment Detail.
 - Attach the 1-step section to the transfer deck using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers.
 - Attach offset hanger clamps to posts at heights shown using 5" half clamps, 3/8" x 1 1/8" BHCS w/pin and 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
 - Attach infill panels to the face of the mainstructure deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin.
 - Attach infill panels to offset hanger clamp assemblies using 3/8" x 3 3/4" BHCS, spacer tubes and 3/8" flange nuts w/pin. See Panel Attachment Detail.
 - Attach the handrails to the 3-step section using 3/8" x 2" BHCS with 3/8" SAE flat washers and 3/8" low crown cap nuts with 3/8" fender washers. Refer to the Handrail Attachment Detail.
 - Attach the handrails to the infill panels using 3/8" x 1 3/8" BHCS w/pin and 3/8" SAE flat washers.
 - Attach the lower rail to the transfer deck using 3/8" x 1 3/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" low crown cap nuts with 3/8" SAE flat washers.
 - Attach the lower rail to the 1-step section using 3/8" x 2" BHCS with 3/8" SAE flat washers and 3/8" low crown cap nuts with 3/8" fender washers. Refer to the Handrail Attachment Detail.
 - (Direct Bury)** With transfer deck and steps level and supports plumb, pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.
- (Surface Mount)** Mark holes for expansion anchors on concrete slab through support plates. Detach the module from the mainstructure and slide module aside, drill 3/8" x 3" deep holes on marks using hammer drill and 3/8" masonry bit. Reposition module over drilled holes and tap expansion anchors into drilled holes. Fasten support plates to expansion anchors using 3/8" standard hex nuts with 3/8" SAE flat washers. Reattach module to structure.
- Install 1/2" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
 - Install protective surfacing before users are allowed to play on the structure.

NOTE: Refer to the site plan drawing for proper orientation.

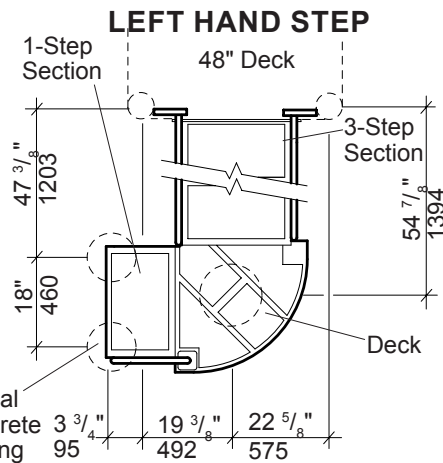
SAFETY NOTE
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

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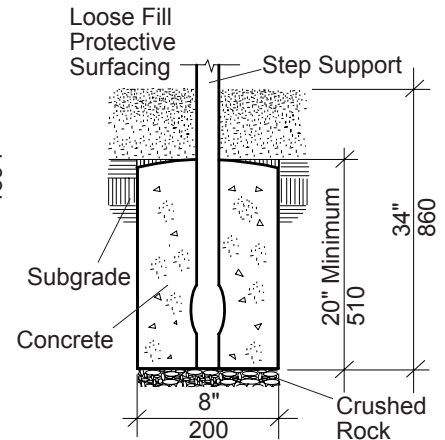
**PLAN VIEW
FOOTING LAYOUT**



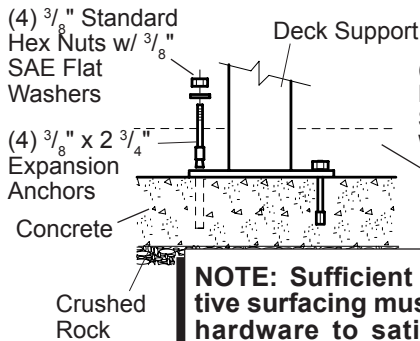
**PLAN VIEW
FOOTING LAYOUT**



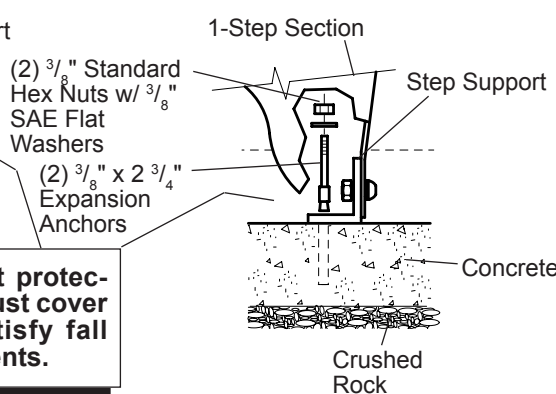
**DETAIL
STEP SUPPORT BURY**



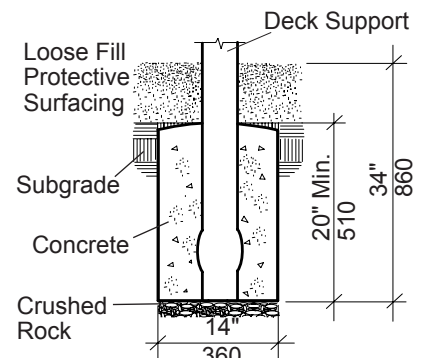
**DETAIL
SURFACE MOUNT
DECK SUPPORT**



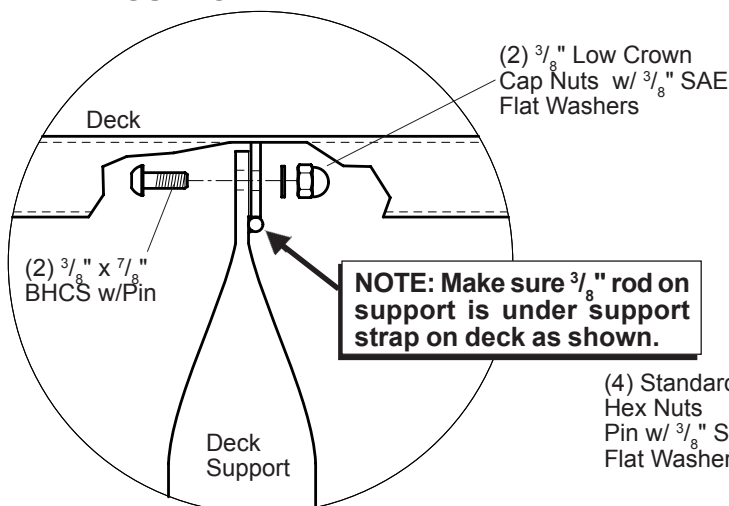
**DETAIL
SURFACE MOUNT
STEP SUPPORT**



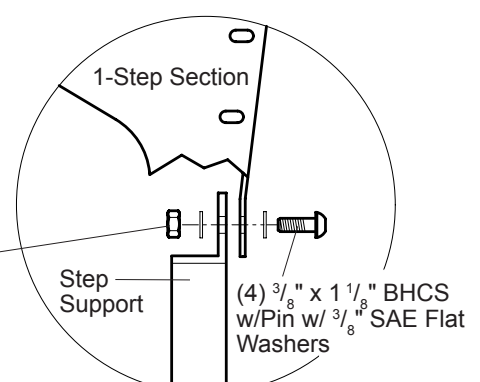
**DETAIL
DECK SUPPORT BURY**



**DETAIL
DECK SUPPORT ATTACHMENT**



**DETAIL
STEP SUPPORT ATTACHMENT**



PlayBooster® 152911 Transfer Module, 48", w/Handrails

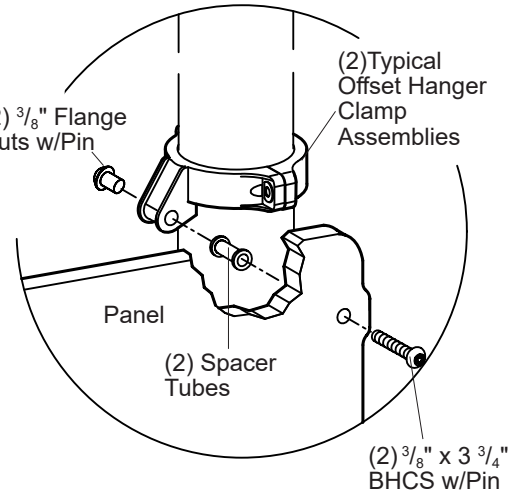
Sheet 2 of 2

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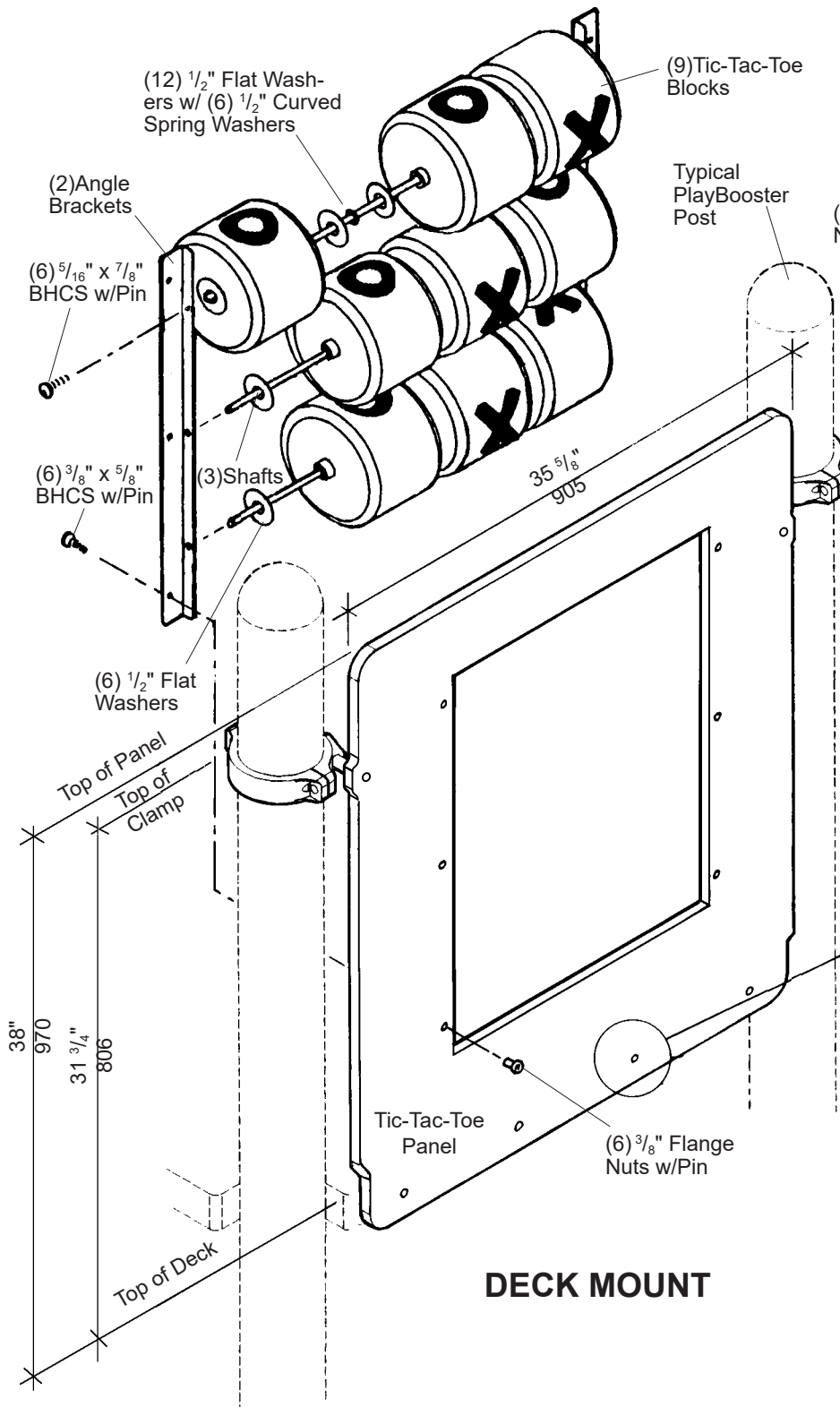
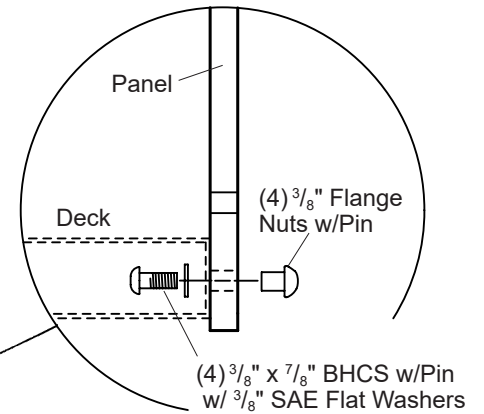
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Document #24445200

DETAIL PANEL ATTACHMENT



DETAIL TENDERDECKS



DECK MOUNT

Parts List

Part#	Description	Qty.
ABOVE DECK		
105327	5" Half Clamp, Specify Color	2
113729	Offset Hanger Clamp, Specify Color.....	2
113468	Spacer Tube, Specify Color.....	2
104715	Tic-Tac-Toe Bracket, Specify Color.....	2
130642	Tic-Tac-Toe Block, Tan	9
113434	Tic-Tac-Toe Panel, Specify Color	1
137157	Shaft Set.....	1
106174	Shaft 1/2 Dia x 20.75" Set, SST	3
134725	Tic-Tac-Toe Hardware Package	1
132626	5/16" x 7/8" BHCS w/Pin, SST	6
100195	3/8" x 5/8" BHCS w/Pin, SST	6
100353	3/8" Flange Nut w/Pin, SST	6
100363	1/2" Flat Washer, SST	18
100380	1/2" Curved Spring Washer.....	6
124900	Tenderdeck Mounting Hardware Package	1
124460	3/8" x 3 3/4" BHCS w/Pin, SST	2
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100351	3/8" Tee Nut, SST.....	4
100353	3/8" Flange Nut w/Pin, SST	6
100365	3/8" SAE Flat Washer, SST.....	4
BELOW DECK		
105327	5" Half Clamp, Specify Color	4
113729	Offset Hanger Clamp, Specify Color.....	4
113468	Spacer Tube, Specify Color.....	2
113464	Angled Panel Bracket, Specify Color.....	1
104715	Tic-Tac-Toe Bracket, Specify Color.....	2
106174	Shaft, SST.....	3
130642	Tic-Tac-Toe Block, Tan	9
113434	Tic-Tac-Toe Panel, Specify Color	1
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
134725	Tic-Tac-Toe Hardware Package	1
132626	5/16" x 7/8" BHCS w/Pin, SST	6
100195	3/8" x 5/8" BHCS w/Pin, SST	6
100353	3/8" Flange Nut w/Pin, SST	6
100363	1/2" Flat Washer, SST	18
100380	1/2" Curved Spring Washer.....	6
124947	Below Deck Mounting Hardware Package	1
124460	3/8" x 3 3/4" BHCS w/Pin, SST	2
100195	3/8" x 5/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100351	3/8" Tee Nut, SST.....	8
100353	3/8" Flange Nut w/Pin, SST	6

Specifications

Permalene® Panel:	Solid color panel measures 35 5/8" wide x 41" high, color specified.
Tic-Tac-Toe Blocks:	Rotationally molded from U.V. stabilized linear low density polyethylene, tan in color with brown molded-in symbols.
Tic-Tac-Toe Brkt:	Formed from .125" thick 5052 aluminum. Finish: ProShield®, color specified.
Shafts:	Fabricated from 1/2" diameter stainless steel with ends tapped 5/16" 18UNC-2B.
Angled Panel Brkt:	Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6061-T6 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.
Spacer Tube:	Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.
Offset Hanger Clamp Assembly:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product

installation/specifications).

Installation Time:	Above Deck Approx. 3/4 man hour Below Deck Approx. 1 man hour
Weight:	Above Deck 50 lbs. Below Deck 56 lbs.

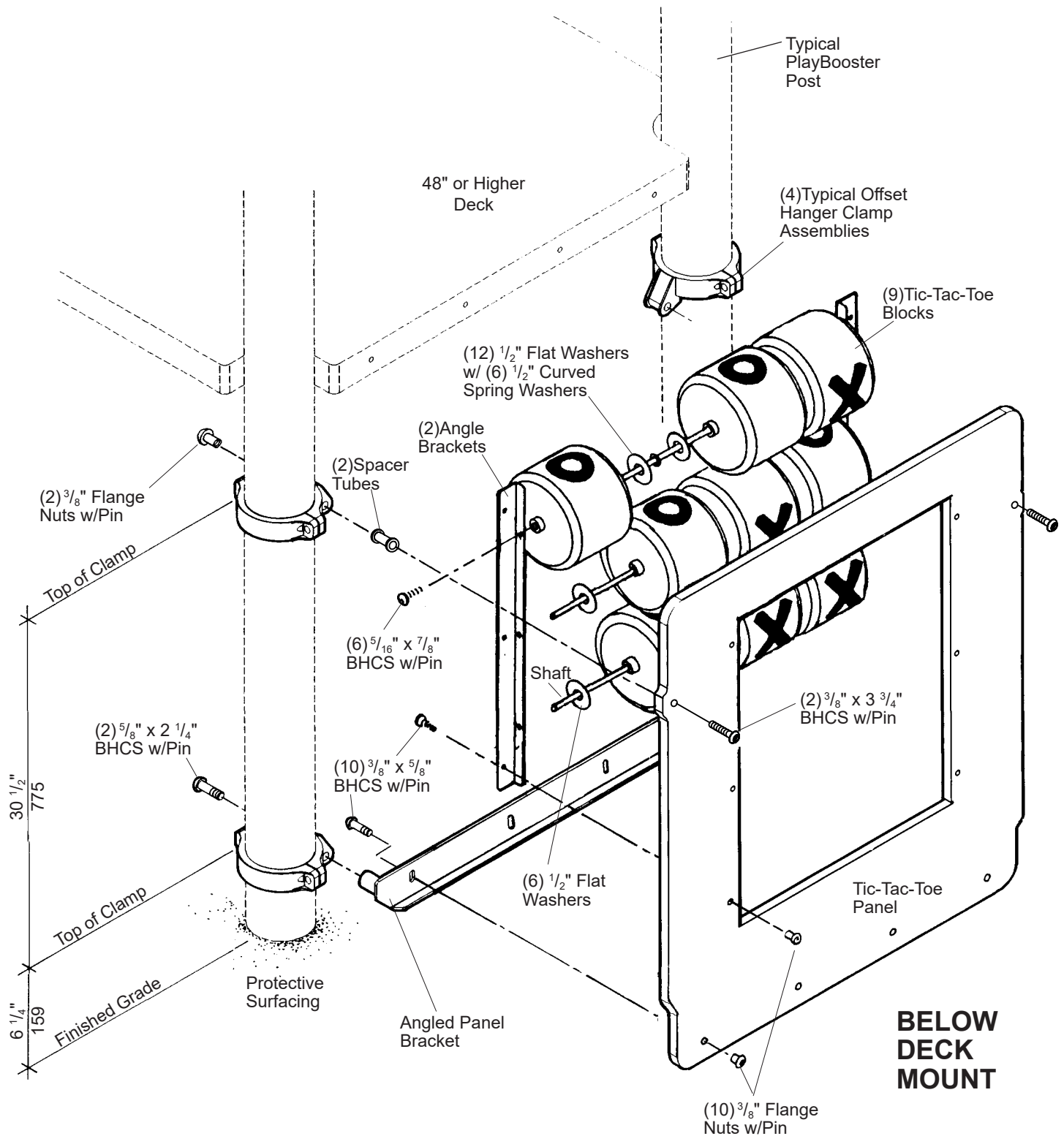
Installation Instructions

ABOVE DECK (See Sheet 1 of 2)

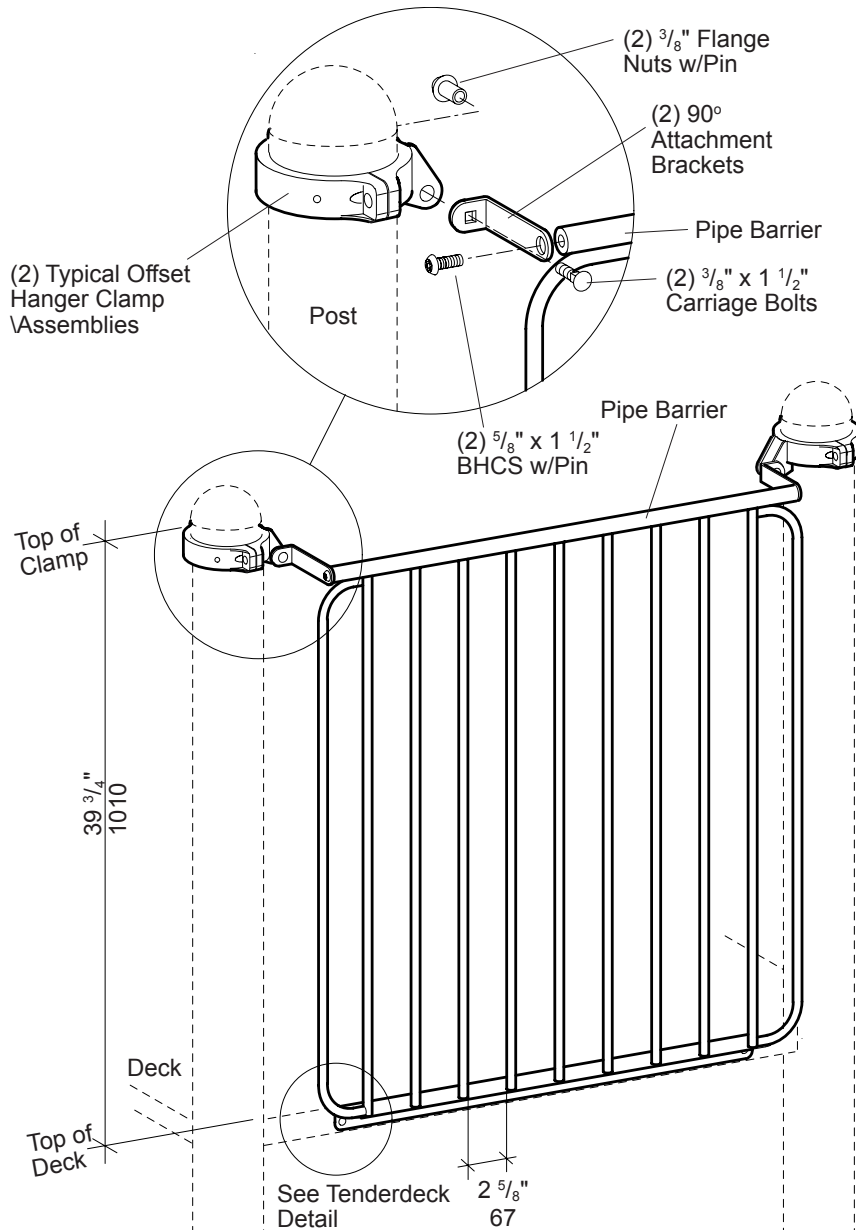
- 1) Attach panel to the face of the deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin. See Detail.
- 2) Attach offset hanger clamp assemblies to posts at height shown, using 5" half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
- 3) Attach panel to offset hanger clamp assemblies, using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. See Panel Attachment Detail.
- 4) Attach shafts to one tic-tac-toe bracket, as shown, using 5/16" x 7/8" BHCS w/pin.
- 5) Thread a 1/2" flat washer onto shaft, then one block over shaft followed by a 1/2" flat washer, 1/2" curved spring washer, and 1/2" flat washer, another block etc., ending with a 1/2" flat washer. Continue in this sequence until all blocks are on shafts. Fasten other tic-tac-toe bracket to shafts as previous.
- 6) Attach tic-tac-toe block assembly to panel using (6) 3/8" x 5/8" BHCS w/pin through tic-tac-toe brackets and 3/8" flange nuts w/pin through panel.
- 7) Install protective surfacing before users are allowed to play on the structure.

BELOW DECK (See Sheet 2 of 2)

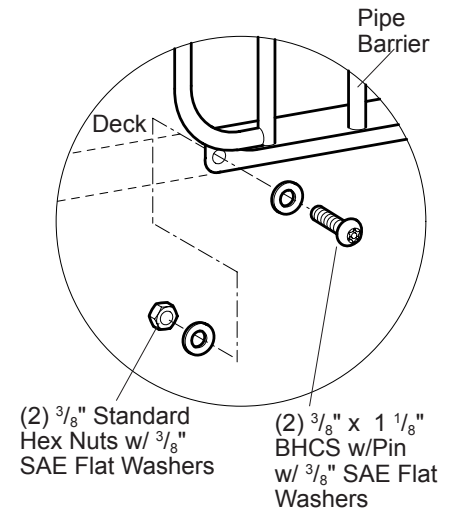
- 1) Attach offset hanger assemblies to posts at height shown, using 5" half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
- 2) Attach angled panel bracket to bottom of panel, using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin. See Panel Attachment Detail.
- 3) Attach angled panel bracket with panel to offset hanger clamp assemblies, using 5/8" x 2 1/4" BHCS w/pin. See Below Deck Mount.
- 4) Attach top of panel to offset hanger clamp assemblies, using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. See Typical Attachment To Post Detail.
- 5) Attach shafts to one tic-tac-toe bracket, as shown, using 5/16" x 7/8" BHCS w/pin.
- 6) Thread a 1/2" flat washer onto shaft, then one block over shaft followed by a 1/2" flat washer, 1/2" curved spring washer, and 1/2" flat washer, another block etc., ending with a 1/2" flat washer. Continue in this sequence until all blocks are on shafts. Fasten other tic-tac-toe bracket to shafts as previous.
- 7) Attach tic-tac-toe block assembly to panel, using (6) 3/8" x 5/8" BHCS w/pin through tic-tac-toe brackets and 3/8" flange nuts w/pin through panel.
- 8) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 9) Install protective surfacing before users are allowed to play on the



**DETAIL
90° ATTACHMENT BRACKETS**



**DETAIL
TENDERDECKS**



DECK MOUNT

Parts List

Part#	Description	Qty.
ABOVE DECK		
132755	Pipe Barrier, Specify Color	1
128824	90° Attachment Bracket, Specify Color.....	2
105327	5" Half Clamp, Specify Color	2
113729	Offset Hanger Clamp, Specify Color	2
100610	1/4" x 5/8" Drive Rivet, AL/SST	2
132739	Barrier, Above Deck Hardware Package	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	6
100201	5/8" x 1 1/2" BHCS w/Pin, SST	2
100351	3/8" Tee Nut, SST.....	4
100353	3/8" Flange Nut w/Pin, SST.....	2
116017	3/8" x 1 1/2" Carriage Bolt w/Patch, SST.....	2
100327	3/8" Standard Hex Nut, SST	2
100365	3/8" SAE Flat Washer, SST.....	4
BELOW DECK		
132755	Pipe Barrier, Specify Color	1
128824	90° Attachment Bracket, Specify Color.....	2
105327	5" Half Clamp, Specify Color	4
113729	Offset Hanger Clamp, Specify Color	4
113464	Angled Panel Bracket, Specify Color.....	1
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
132741	Barrier, Below Deck Hardware Package	1
116017	3/8" x 1 1/2" Carriage Bolt, SST	2
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100196	3/8" x 7/8" BHCS w/Pin, SST	2
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100351	3/8" Tee Nut, SST.....	8
100201	5/8" x 1 1/2" BHCS w/Pin, SST	2
100327	3/8" Standard Hex Nut, SST	2
100365	3/8" SAE Flat Washer, SST.....	4
100353	3/8" Flange Nut w/Pin, SST	2

Specifications

Barrier:	Weldment comprised of 5/8" solid steel vertical rails, 1 1/8" O.D. x 11 GA (.120") steel horizontal rails with 203 or 303 stainless steel welded inserts with 5/8" internal threads, 1 1/2" x 1 1/2" x 29 1/2" angle iron. Barrier measures 33 7/8" wide x 39 13/16" high. Finish: TenderTuff™, color specified.
90° Bracket:	Formed from 1/4" x 1 1/4" HRPO flat steel. Finish: ProShield®, color specified.
Angled Panel Brkt.:	Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6061-T6 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.
Offset Hanger Clamp Assembly:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications)
Installation Time:	Approx. 1 man hour
Weight:	Above Deck 52 lbs. Below Deck 56 lbs.

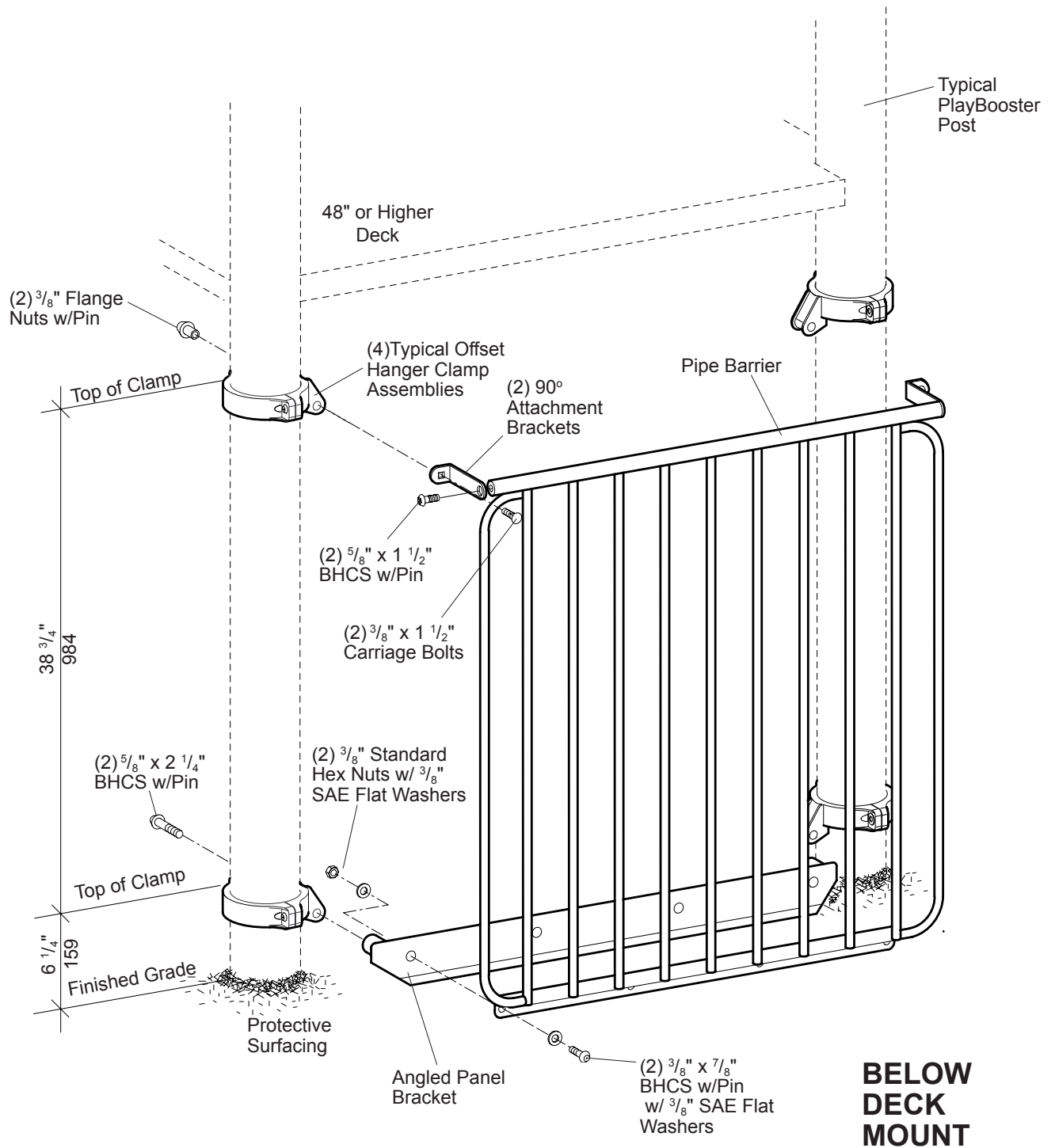
Installation Instructions

ABOVE DECK (See Sheet 1 of 2)

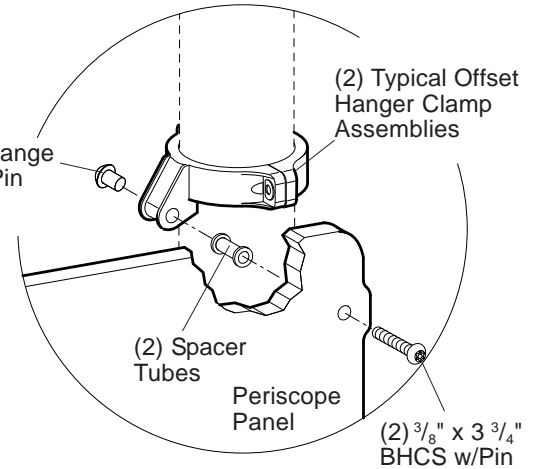
- 1) Attach pipe barrier to the face of the deck using 3/8" x 1 1/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. Refer To The Tenderdeck Detail..
- 2) Attach offset hanger clamps to posts at height shown, using 5" half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
- 3) Attach the 90° attachment brackets to pipe barrier using 5/8" x 1 1/2" BHCS w/pin. Refer To The 90° Attachment Bracket Detail.
- 4) Attach the 90° attachment brackets to the offset hanger clamps using 3/8" x 1 1/2" carriage bolts and 3/8" flange nuts w/pin. Refer To The 90° Attachment Bracket Detail.
- 5) Install protective surfacing before users are allowed to play on the structure.

BELOW DECK (See Sheet 2 of 2)

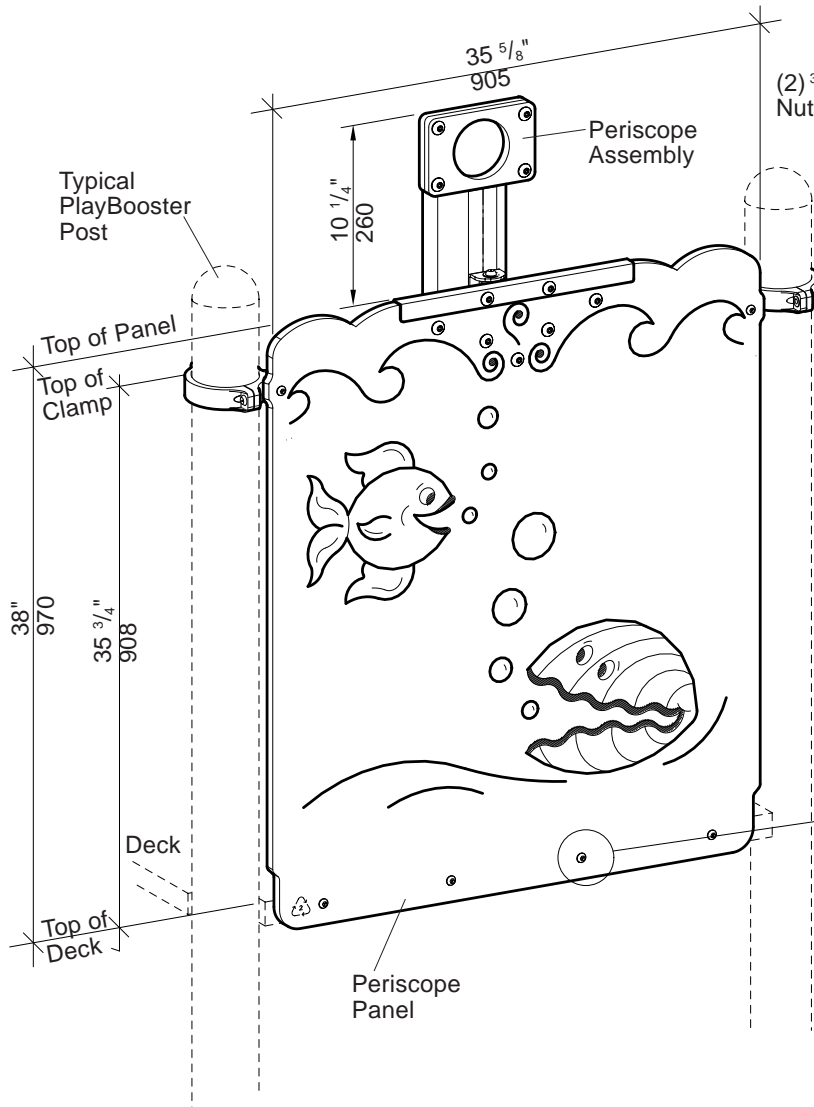
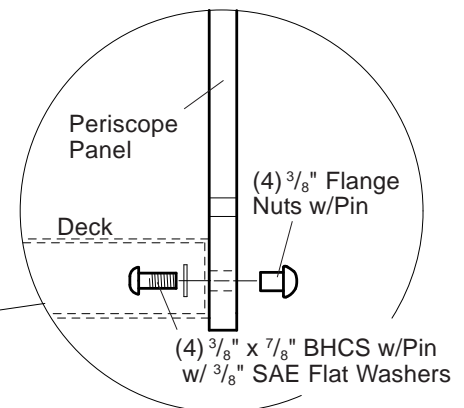
- 1) Attach offset hanger assemblies to posts at height shown. Using 5" half clamps and 3/8" x 1 1/8" BHCS w/pin and with 3/8" tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
- 2) Attach angled panel bracket to bottom of pipe barrier using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" standard hex nuts with 3/8" SAE flat washers. See Below Deck Mount.
- 3) Attach angled panel bracket with pipe barrier to offset hanger clamp assemblies using 5/8" x 2 1/4" BHCS w/pin. See Below Deck Mount.
- 4) Attach the 90° attachment brackets to pipe barrier using 5/8" x 1 1/2" BHCS w/pin. Refer To The 90° Attachment Bracket Detail.
- 5) Attach the 90° attachment brackets to the offset hanger clamps using 3/8" x 1 1/2" carriage bolts and 3/8" flange nuts w/pin. Refer To The 90° Attachment Bracket Detail.
- 6) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec sheet.
- 7) Install protective surfacing before users are allowed to play on the structure.



DETAIL PANEL ATTACHMENT



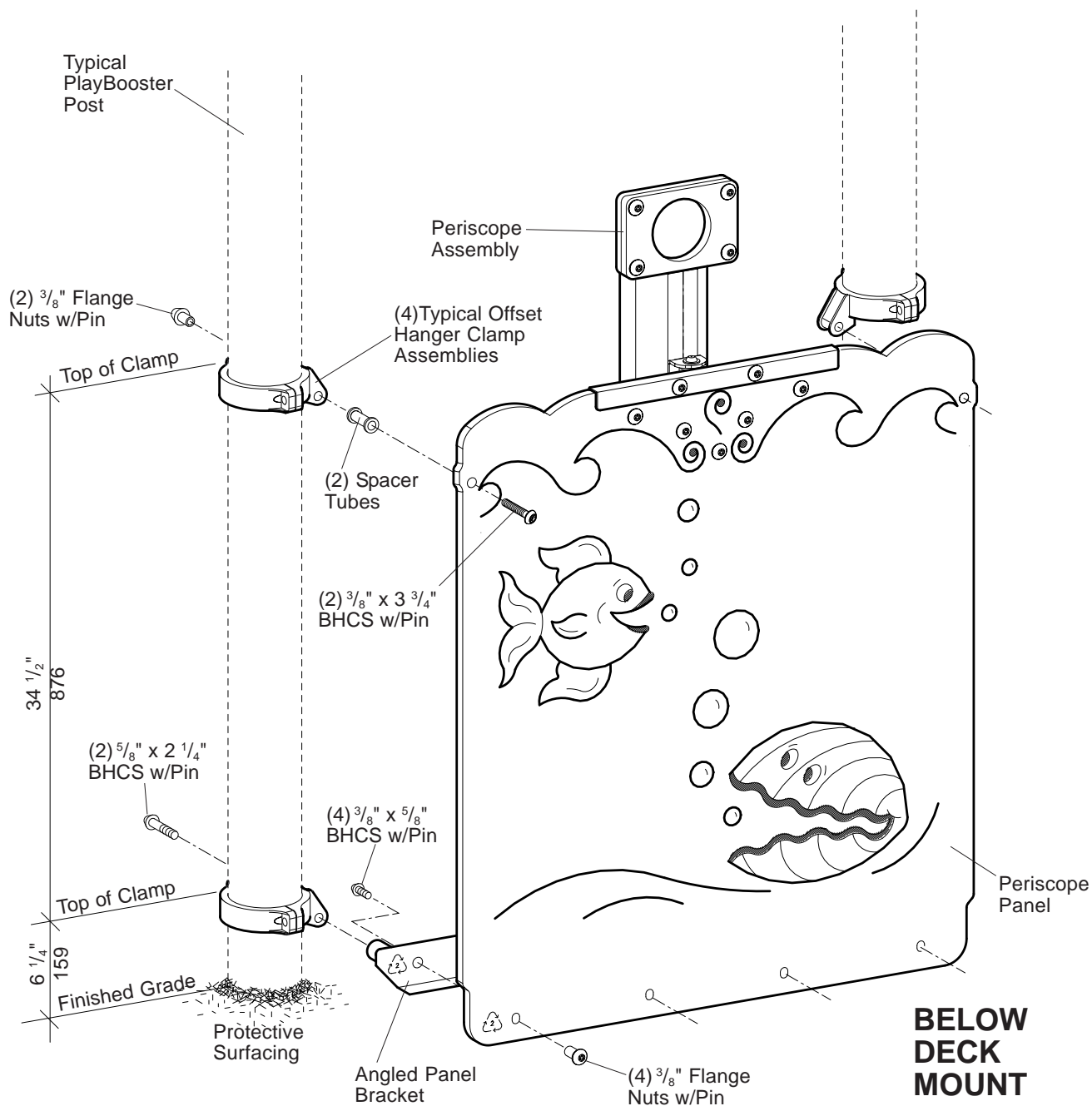
DETAIL TENDERDECKS

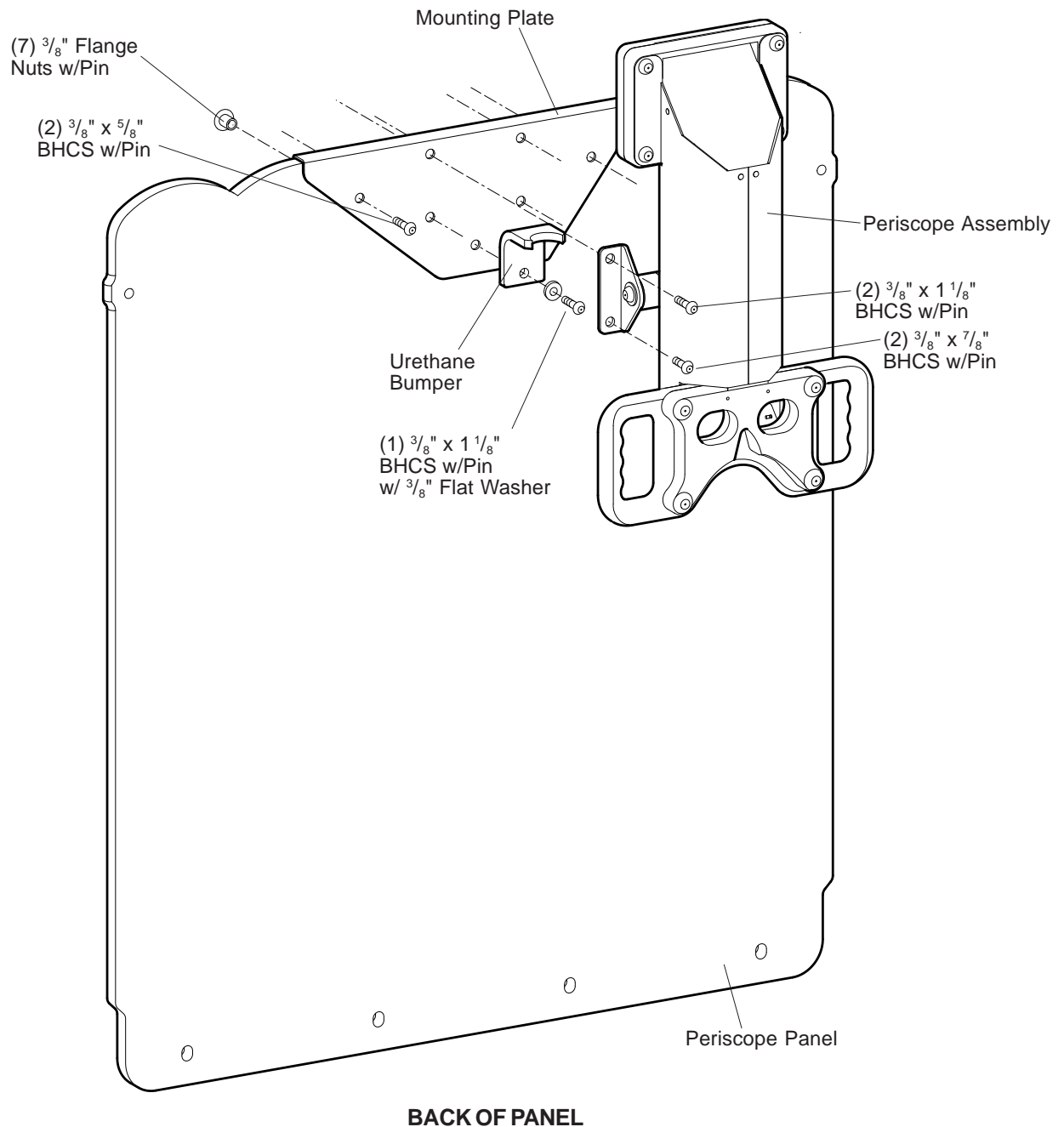


DECK MOUNT

NOTE:

The minimum height deck above a Ground Level Periscope Panel is 64".





Parts List

Part#	Description	Qty.
ABOVE DECK		
129071	Periscope Panel, Specify Color	1
129118	Periscope Assembly, Specify Color	1
130269	Mounting Plate, Specify Color	1
113729	Offset Hanger Clamp, Specify Color	2
105327	5" Half Clamp, Specify Color	2
113468	Spacer Tube, Specify Color	2
100610	1/4" x 5/8" Drive Rivet, AL/SST	2
130367	Periscope Attachment Hardware Package	1
100195	3/8" x 5/8" BHCS w/Pin, SST	2
100196	3/8" x 7/8" BHCS w/Pin, SST	2
100198	3/8" x 1 1/8" BHCS w/Pin, SST	3
100353	3/8" Flange Nut w/Pin, SST	7
100362	3/8" Flat Washer, SST	1
145121	Urethane Bumper	1
124900	Tenderdeck Mounting Hardware Package	1
124460	3/8" x 3 3/4" BHCS w/Pin, SST	2
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100351	3/8" Tee Nut, SST	4
100353	3/8" Flange Nut w/Pin, SST	6
100365	3/8" SAE Flat Washer, SST	4
BELOW DECK		
129071	Periscope Panel, Specify Color	1
129118	Periscope Assembly, Specify Color	1
130269	Mounting Plate, Specify Color	1
113729	Offset Hanger Clamp, Specify Color	4
105327	5" Half Clamp, Specify Color	4
113468	Spacer Tube, Specify Color	2
113464	Angled Panel Bracket, Specify Color	1
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
130367	Periscope Attachment Hardware Package	1
100195	3/8" x 5/8" BHCS w/Pin, SST	2
100196	3/8" x 7/8" BHCS w/Pin, SST	2
100198	3/8" x 1 1/8" BHCS w/Pin, SST	3
100353	3/8" Flange Nut w/Pin, SST	7
100362	3/8" Flat Washer, SST	1
145121	Urethane Bumper	1
124947	Below Deck Mounting Hardware Package	1
124460	3/8" x 3 3/4" BHCS w/Pin, SST	2
100195	3/8" x 5/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100351	3/8" Tee Nut, SST	8
100353	3/8" Flange Nut w/Pin, SST	6

Specifications

Permalene® Panel:	Two color panel measures 35 5/8" x 41" high, color specified.
Periscope Assy.:	Fabricated from an octagon 14 GA (.075") steel tube with (2) 18 GA (.048") 304 stainless steel bright annealed (reflective finishes). Periscope rotates vertically and horizontally. Finish: ProShield®, color specified. Permalene: Hand-grip and lense covers are black in color.
Mounting Plate:	Fabricated from formed 11 GA (.120") HRS. Finish: ProShield, color specified.
Angled Panel Brkt.:	Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6061-T6 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.
Spacer Tube:	Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.
Offset Hanger Clamp Assembly:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Above Deck Approx. 3/4 man hour
Below Deck Approx. 1 man hour
Weight: Above Deck 67 lbs.
Below Deck 73 lbs.

Installation Instructions

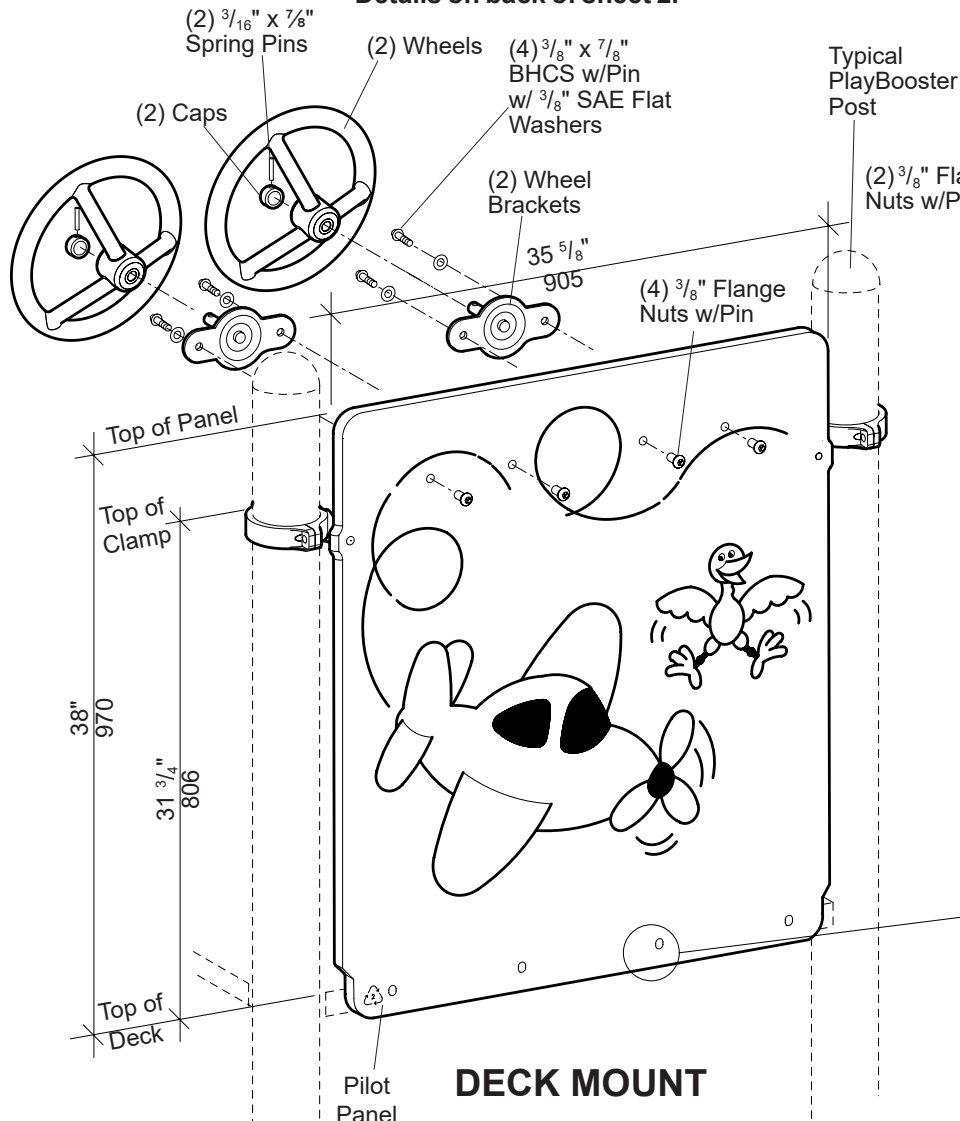
ABOVE DECK

- 1) Attach panel to the face of the deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin. Refer to the Tenderdeck Detail.
- 2) Attach offset hanger clamp assemblies to posts at height shown, using half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 3) Attach panel to the offset hanger clamp assemblies, using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. Refer to the Panel Attachment Detail.
- 4) Attach periscope assembly to panel, using mounting plate, 3/8" x 5/8" BHCS w/pin, 3/8" x 7/8" BHCS w/pin, 3/8" x 1 1/8" BHCS w/pin and 3/8" flange nuts w/pin, as shown.
- 5) Attach urethane bumper to periscope assembly, using 3/8" x 1 1/8" BHCS w/pin with 3/8" flat washer and 3/8" flange nut w/pin, as shown.
- 6) Install protective surfacing before users are allowed to play on the structure.

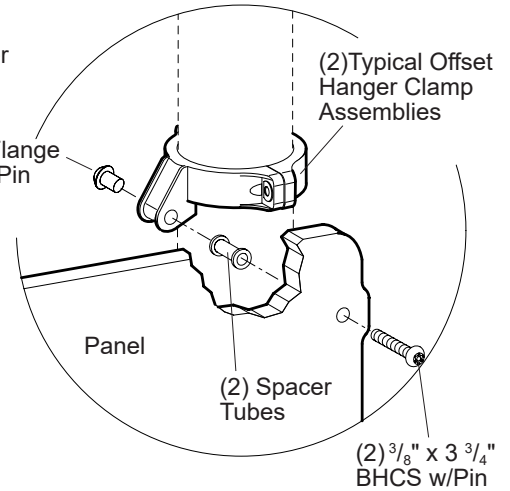
BELOW DECK

- 1) Attach offset hanger clamp assemblies to posts at height shown, using half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 2) Attach angled panel bracket to bottom of panel, using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin. Refer to Below Deck Mount.
- 3) Attach angled panel bracket with panel to offset hanger clamp assemblies, using 5/8" x 2 1/4" BHCS w/pin. Refer to Below Deck Mount.
- 4) Attach top of panel to offset hanger clamp assemblies, using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. Refer to Below Deck Mount.
- 5) Attach periscope assembly to panel, using mounting plate, 3/8" x 5/8" BHCS w/pin, 3/8" x 7/8" BHCS w/pin, 3/8" x 1 1/8" BHCS w/pin and 3/8" flange nuts w/pin, as shown.
- 6) Attach urethane bumper to periscope assembly, using 3/8" x 1 1/8" BHCS w/pin with 3/8" flat washer and 3/8" flange nut w/pin, as shown.
- 7) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 8) Install protective surfacing before users are allowed to play on the structure.

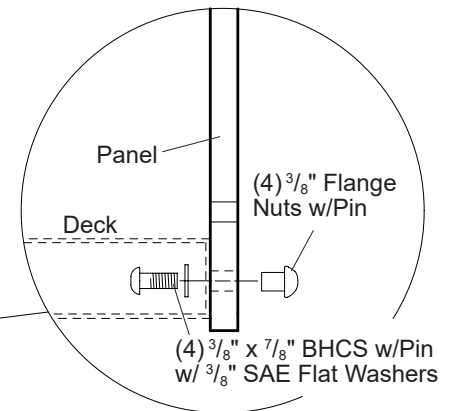
Refer to Wheel Assembly
Details on back of sheet 2.



DETAIL PANEL ATTACHMENT

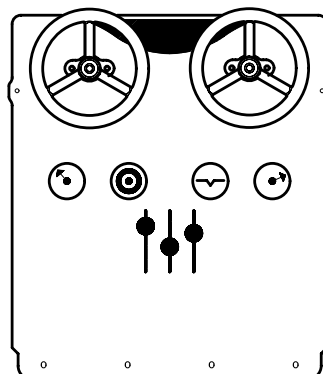


DETAIL TENDERDECKS



DECK MOUNT

Back Side



NOTE: Steering Wheel Infill Panel available. Refer to the Wheel Spec Sheet.

Parts List

Part#	Description	Qty.
ABOVE DECK		
127588	Pilot Panel, Specify Color.....	1
108432	Wheel, Specify Color.....	2
127242	Steering Wheel Bracket, Specify Color.....	2
105327	5" Half Clamp, Specify Color.....	2
113729	Offset Hanger Clamp, Specify Color.....	2
113468	Spacer Tube, Specify Color.....	2
100610	1/4" x 5/8" Drive Rivet, AL/SST.....	2
240451	Permalene Panel Hardware Package	2
100196	3/8" x 7/8" BHCS w/Pin, SST.....	4
100353	3/8" Flange Nut w/Pin, SST.....	4
237528	3/16" x 7/8" Spring Pin, SST.....	2
234353	Cap, White.....	2
100365	3/8" SAE Flat Washers, SST.....	2
124900	Tenderdeck Mounting Hardware Package	1
124460	3/8" x 3 3/4" BHCS w/Pin, SST.....	2
100196	3/8" x 7/8" BHCS w/Pin, SST.....	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	4
100351	3/8" Tee Nut, SST.....	4
100353	3/8" Flange Nut w/Pin, SST.....	6
100365	3/8" SAE Flat Washer, SST.....	4
BELOW DECK		
127588	Pilot Panel, Specify Color.....	1
113464	Angled Panel Bracket, Specify Color.....	1
127242	Steering Wheel Bracket, Specify Color.....	2
108432	Wheel, Specify Color.....	2
105327	5" Half Clamp, Specify Color.....	4
113729	Offset Hanger Clamp, Specify Color.....	4
113468	Spacer Tube, Specify Color.....	2
100610	1/4" x 5/8" Drive Rivet, AL/SST.....	4
240451	Permalene Panel Hardware Package	2
100196	3/8" x 7/8" BHCS w/Pin, SST.....	4
100353	3/8" Flange Nut w/Pin, SST.....	4
237528	3/16" x 7/8" Spring Pin, SST.....	2
234353	Cap, White.....	2
100365	3/8" SAE Flat Washers, SST.....	2
124947	Ground Level Mounting Hardware Package	1
124460	3/8" x 3 3/4" BHCS w/Pin, SST.....	2
100195	3/8" x 5/8" BHCS w/Pin, SST.....	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST.....	8
100203	5/8" x 2 1/4" BHCS w/Pin, SST.....	2
100351	3/8" Tee Nut, SST.....	8
100353	3/8" Flange Nut w/Pin, SST.....	6

Specifications

Permalene® Panel:	Two color panel measures 35 3/8" wide x 41" high, color specified.
Wheel Bracket:	Weldment comprised of formed 3/16" plate and 5/8" O.D. stainless steel shaft. Finish: ProShield®, color specified.
Wheel:	12" diameter castA356 aluminum alloy. Finish: TenderTuff®, color specified.
Angled Panel Brkt:	Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6005-T5 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield, color specified.

Specifications are subject to change without notice.

PlayBooster® 119514 Pilot Panel

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

Offset Hanger

Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Above Deck Approx. 3/4 man hour
Below Deck Approx. 1 man hour

Weight: Above Deck 53 lbs.
Below Deck 61 lbs.

Installation Instructions

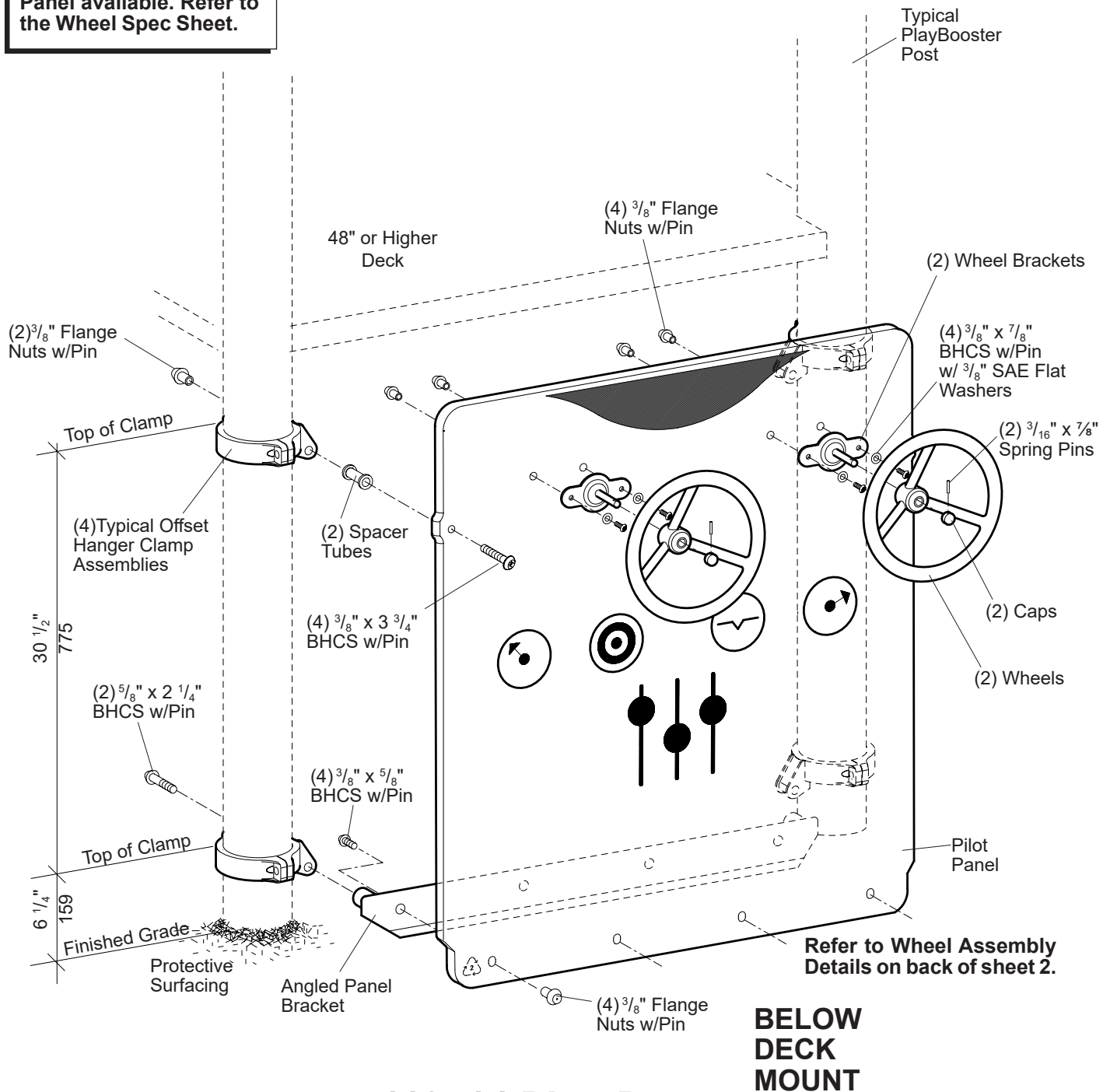
ABOVE DECK (See Sheet 1 of 2)

- 1) (Attach panel to the face of the decks, using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin. Refer to the Tenderdeck Detail.
- 2) Attach offset hanger assemblies to posts at height shown, using half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 3) Attach panel to offset hanger assemblies, using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. See Panel Attachment Detail.
- 4) Attach wheels as shown on sheet 1 & back of sheet 2.
- 5) Install protective surfacing before users are allowed to play on the structure.

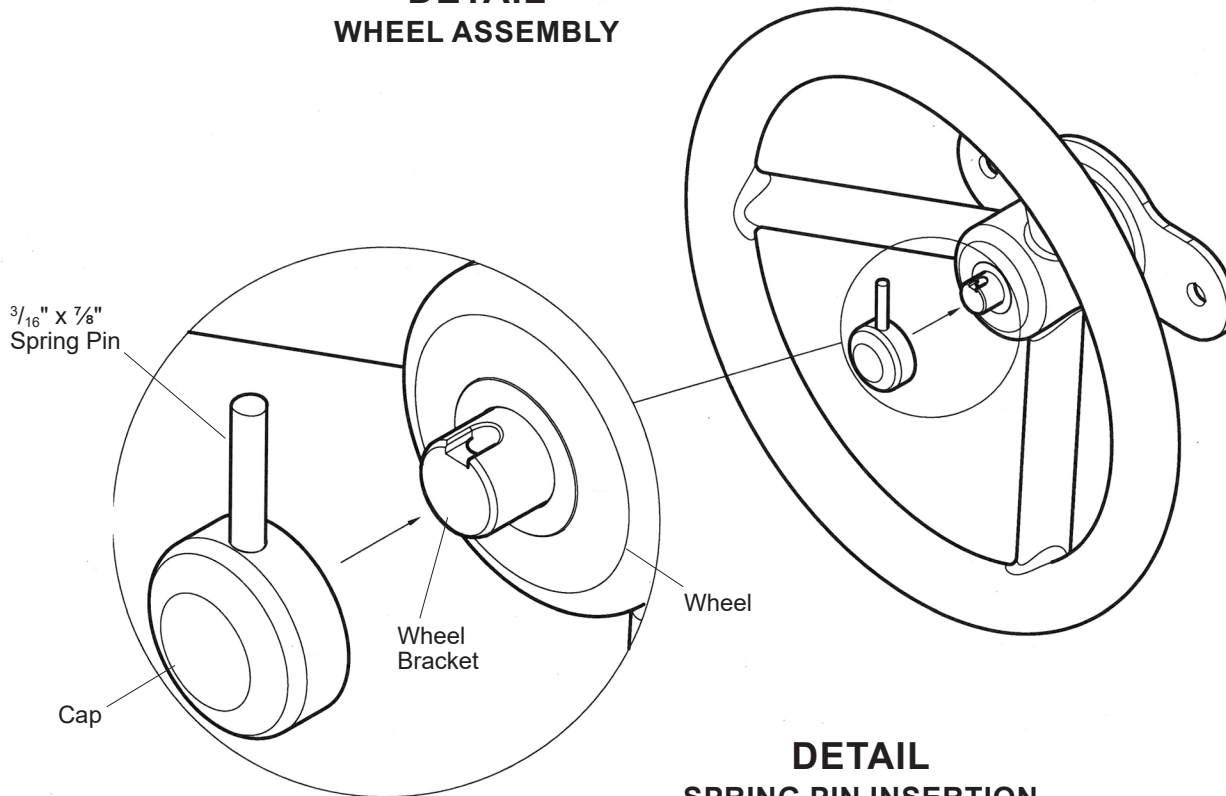
BELOW DECK (See Sheet 2 of 2)

- 1) Attach offset hanger assemblies to posts at height shown, using half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 2) Attach angled panel bracket to bottom of panel using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin. See Below Deck Mount.
- 3) Attach angled panel bracket with panel to offset hanger assemblies, using 5/8" x 2 1/4" BHCS w/pin. See Below Deck Mount.
- 4) Attach top of panels to offset hanger assemblies, using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. See Below Deck Mount.
- 5) Attach wheels as shown on front & back of sheet 2.
- 6) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 7) Install protective surfacing before users are allowed to play on the structure.

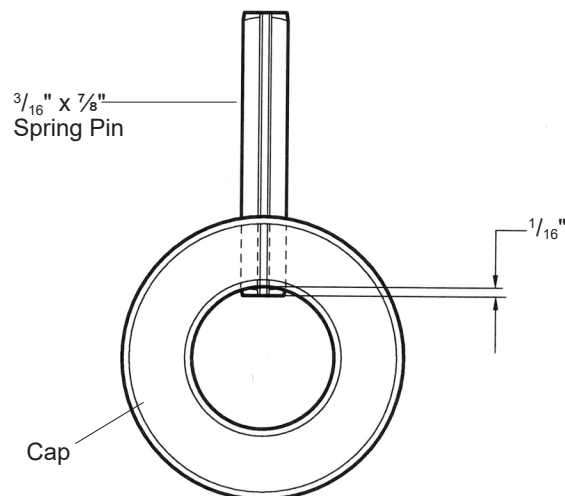
NOTE: Steering Infill Panel available. Refer to the Wheel Spec Sheet.



DETAIL WHEEL ASSEMBLY



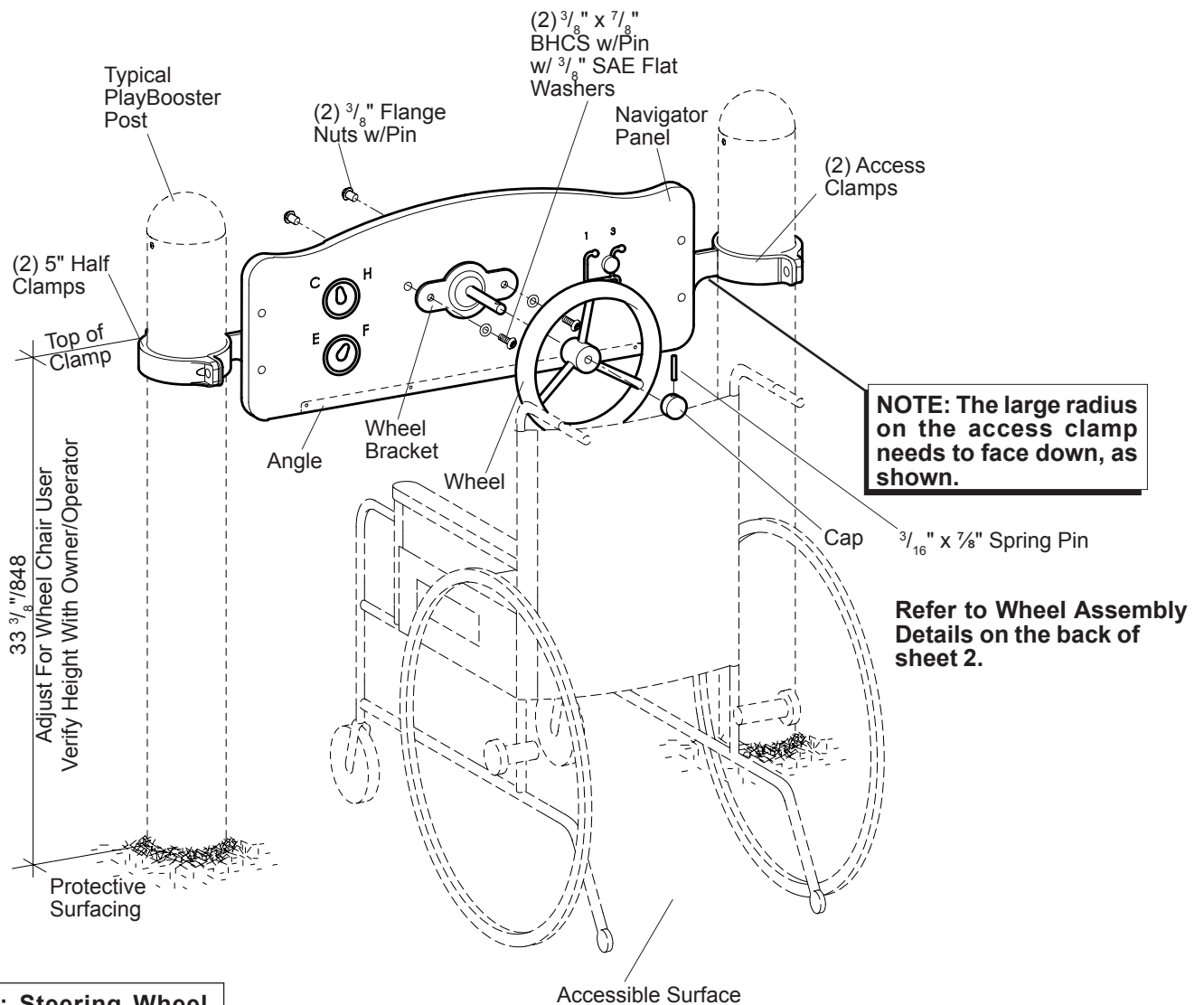
DETAIL SPRING PIN INSERTION (CAP BACK VIEW)



NOTE: To assist in the alignment of the cap to the wheel bracket shaft, tap spring pin through cap approximately $\frac{1}{16}$ ". Orient spring pin to groove on wheel bracket shaft. Slide cap in place and tap spring pin through cap and shaft until flush.

SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)



NOTE: Steering Wheel Infill Panel available. Refer to the Wheel Spec Sheet.

Parts List

Part#	Description	Qty.
138085	Navigator Panel, Specify Color.....	1
108432	Steering Wheel, Specify Color.....	1
127242	Steering Wheel Bracket, Specify Color.....	1
127331	Angle, Black.....	1
188387	Access Clamp, Specify Color.....	2
105327	5" Half Clamp, Specify Color.....	2
100610	1/4" x 5/8" Drive Rivet, AL/SST.....	2
211890	Access Panel Spacer, Specify Color.....	2
212999	Panel Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST.....	4
100351	3/8" Tee Nut, SST.....	4
100353	3/8" Flange Nut w/Pin, SST.....	4
127463	Torx Hex Bit.....	1
127872	#14 x 3/4" Torx Screw, SST.....	4
100171	3/8" x 1 1/2" BHCS w/Pin, SST.....	4
100365	3/8" SAE Flat Washer, SST.....	8
240451	Driver Panel Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST.....	2
100353	3/8" Flange Nut w/Pin, SST.....	2
237528	3/16" x 7/8" Spring Pin, SST.....	1
234353	Cap, White.....	1
100365	3/8" SAE Flat Washer, SST.....	2

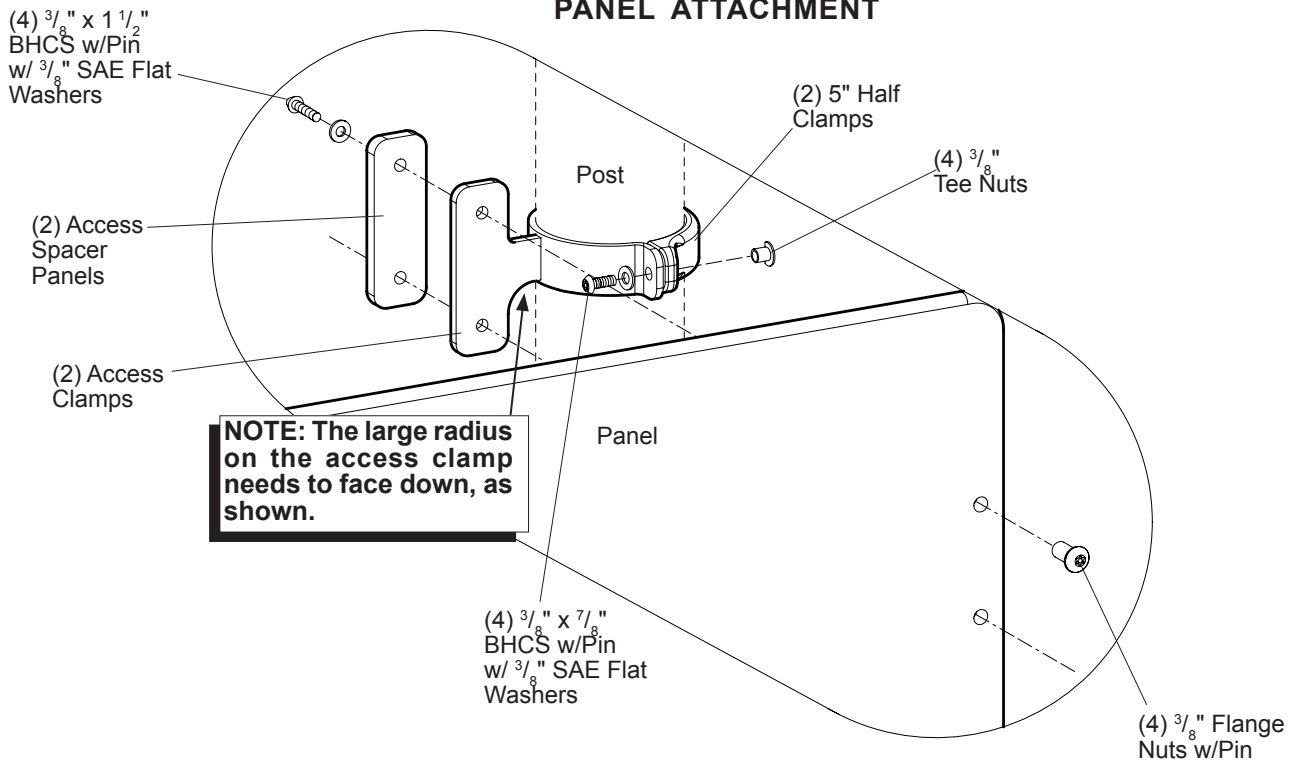
Specifications

Panel:	Two color Permalene® panel measures 34" wide x 13" high, color specified.
Panel Spacer:	Permalene®, color specified.
Angle:	Fabricated from formed 11 GA (.120") HRPO sheet steel. Finish: ProShield®, Black in color.
Wheel:	12" diameter cast A356 aluminum alloy. Finish: TenderTuff®, color specified.
Wheel Bracket:	Weldment comprised of formed 3/16" plate and 5/8" O.D. stainless steel shaft. Finish: ProShield, color specified.
Access Clamp:	Weldment comprised of 3/8" HRPO steel plate and 1/4" x 1 3/4" wide steel clamp. Finish: ProShield, color specified.
Half Clamp:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	Approx. 1/2 man hour
Weight:	23 lbs.

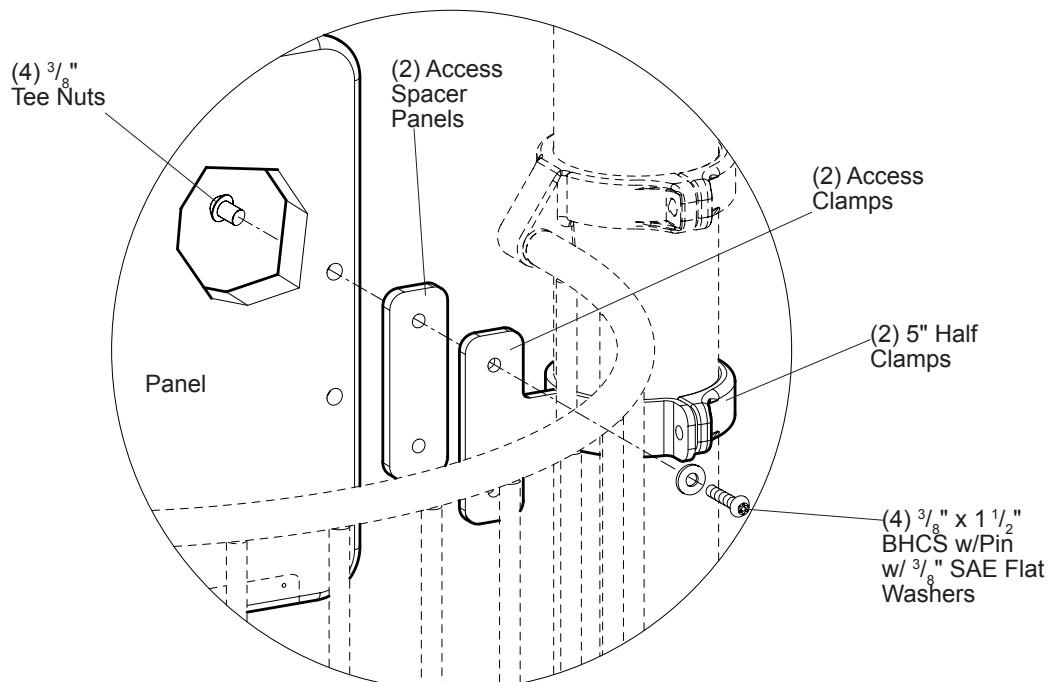
Installation Instructions

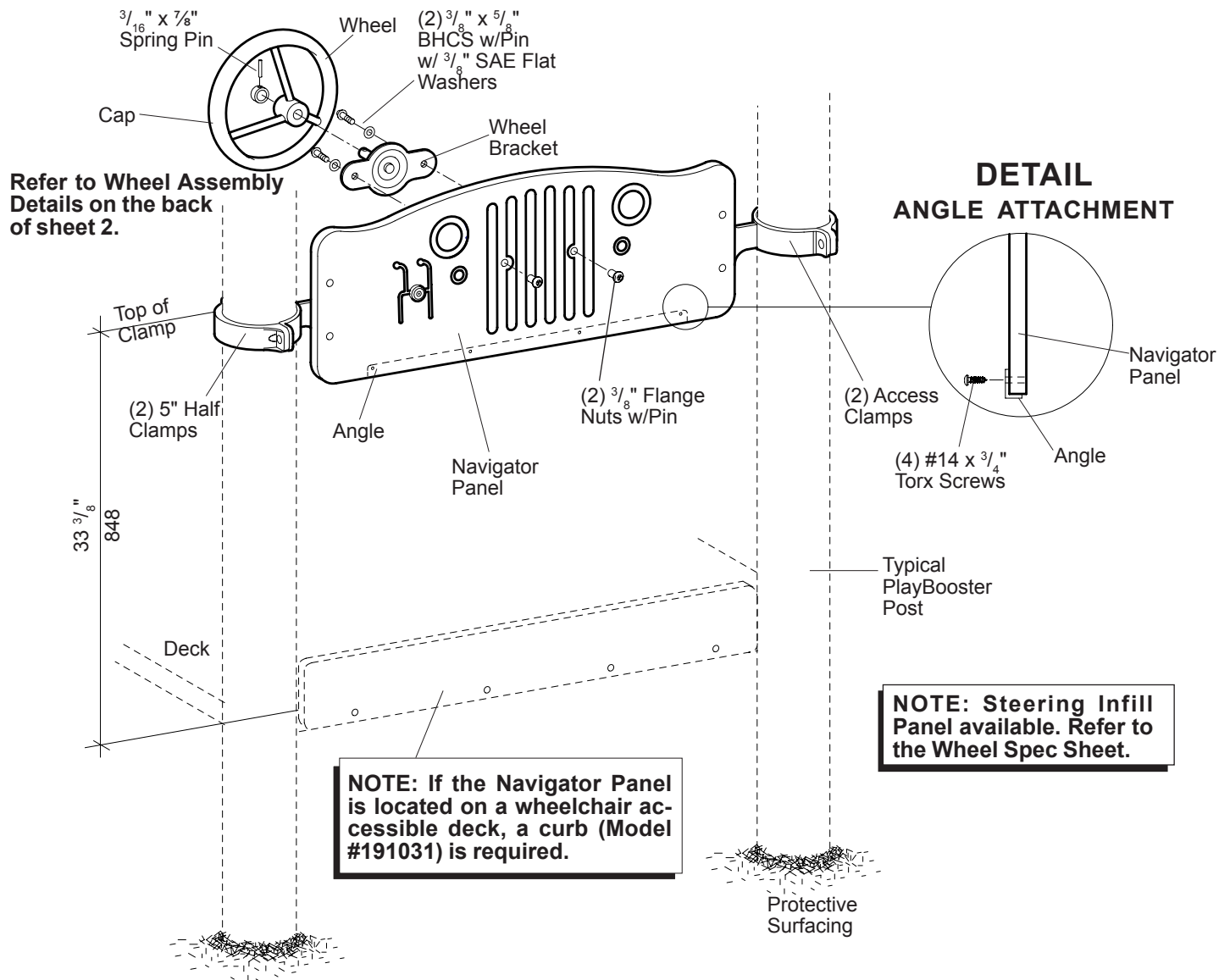
- 1) Attach the angle to the bottom of the panel using #14 x 3/4" torx screws. Refer to the Angle Attachment Detail.
- 2) Attach the access clamps to posts at the height shown, using 5" half clamps, 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" tee nuts. **NOTE:** The large radius on the access clamp needs to face down, as shown.
- 3) Attach panel and access spacer panels to access clamps, using 3/8" x 1 1/2" BHCS w/pin, with 3/8" SAE flat washers and 3/8" flange nuts w/pin. Refer to the Panel Attachment Detail.
- 4) Attach wheel bracket to panel, using 3/8" x 5/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin. Slide wheel and cap onto wheel bracket shaft and tap 3/16" x 7/8" spring pin through cap and shaft. Refer to Wheel Assembly Details on the back of sheet 2.
- 5) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Assembly sheet.
- 6) Install protective surfacing before users are allowed to play on the structure.

DETAIL PANEL ATTACHMENT

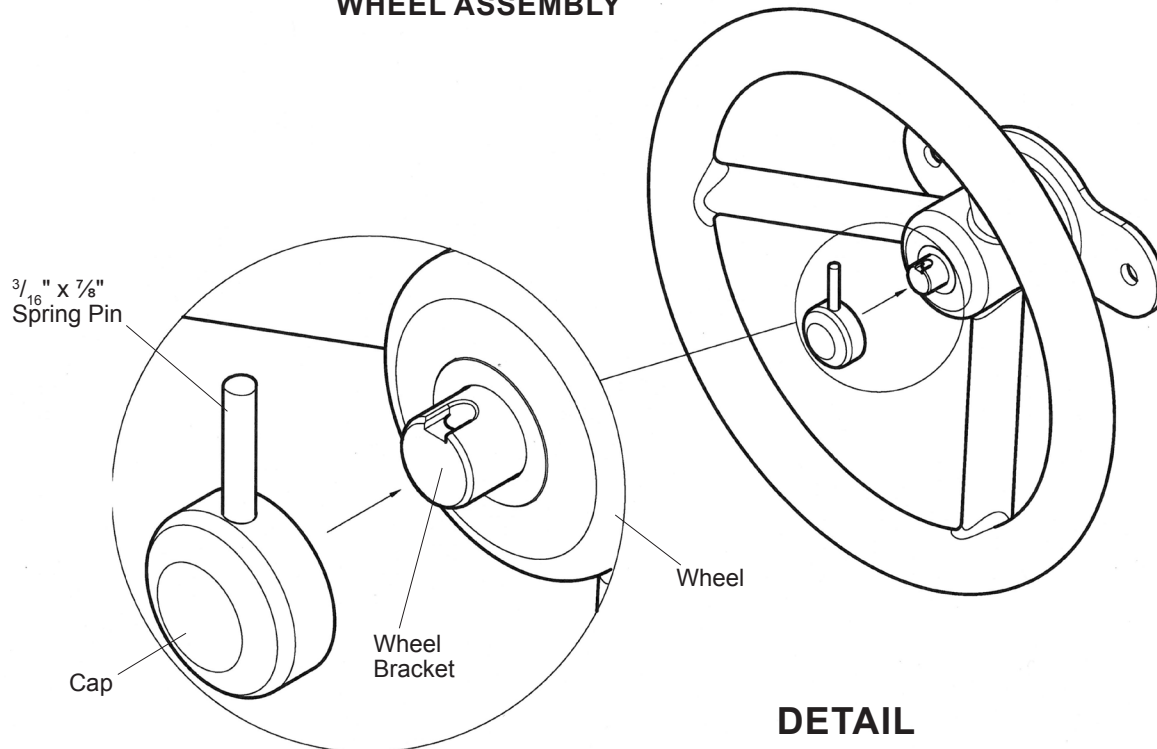


DETAIL PANEL ATTACHMENT (WITH BALCONY DECK)

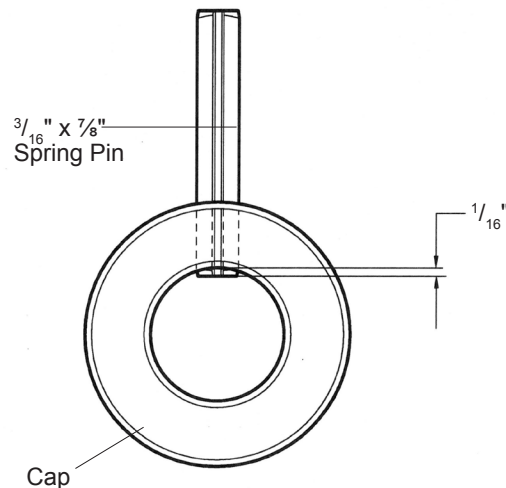




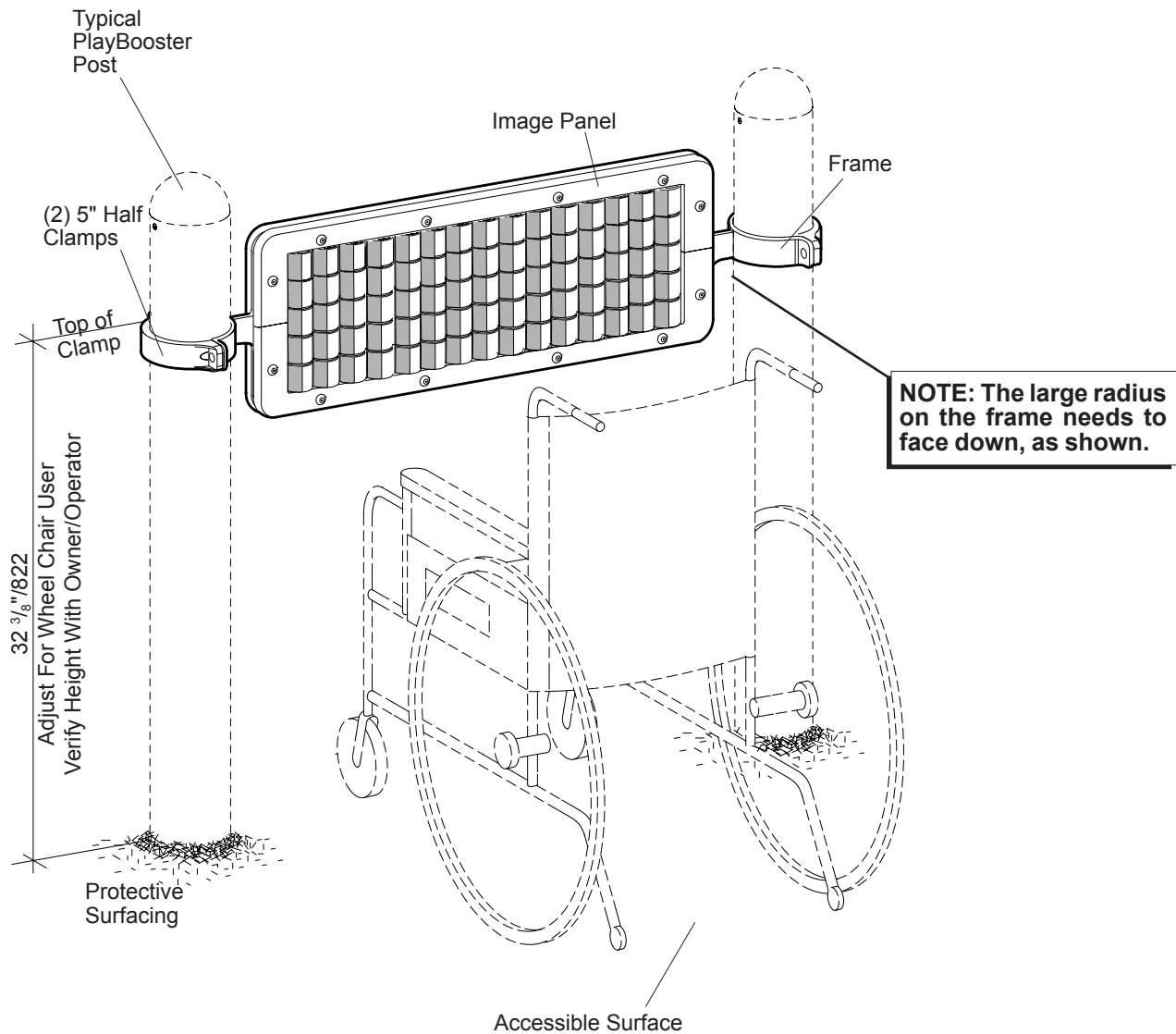
DETAIL WHEEL ASSEMBLY



DETAIL SPRING PIN INSERTION (CAP BACK VIEW)



NOTE: To assist in the alignment of the cap to the wheel bracket shaft, tap spring pin through cap approximately $\frac{1}{16}$ ". Orient spring pin to groove on wheel bracket shaft. Slide cap in place and tap spring pin through cap and shaft until flush.



Parts List

Part#	Description	Qty.
127483	Frame, Specify Color.....	1
105327	5" Half Clamp, Specify Color	2
136751	Pivot Block Set.....	1
115460	1/2" x 11 7/16" Rod, Aluminum.....	15
100610	1/4" x 5/8" Drive Rivet, Specify Color.....	2
129065	Reach Image Panel Set, Specify Color	1
127460	Front Panel, Specify Color	2
127433	Back Panel, Specify Color.....	2
127438	Cover Panel, Specify Color.....	2
213030	Panel Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100199	3/8" x 2 1/4" BHCS w/Pin, SST	8
100351	3/8" Tee nut, SST	4
100353	3/8" Flange Nut w/Pin, SST	12
113027	3/8" x 1 3/8" BHCS w/Pin, SST	4
100365	3/8" SAE Flat Washers, SST	4

Specifications

Image Panel: Solid color Permalene® panel measures 34 1/4" wide x 13" high, color specified.

Pivot Block: U.V. stabilized high-density polyethylene, tan on one side and brown on the other.

Frame: Weldment comprised of 1/4" steel. Finish: ProShield®, color specified.

Half Clamp: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

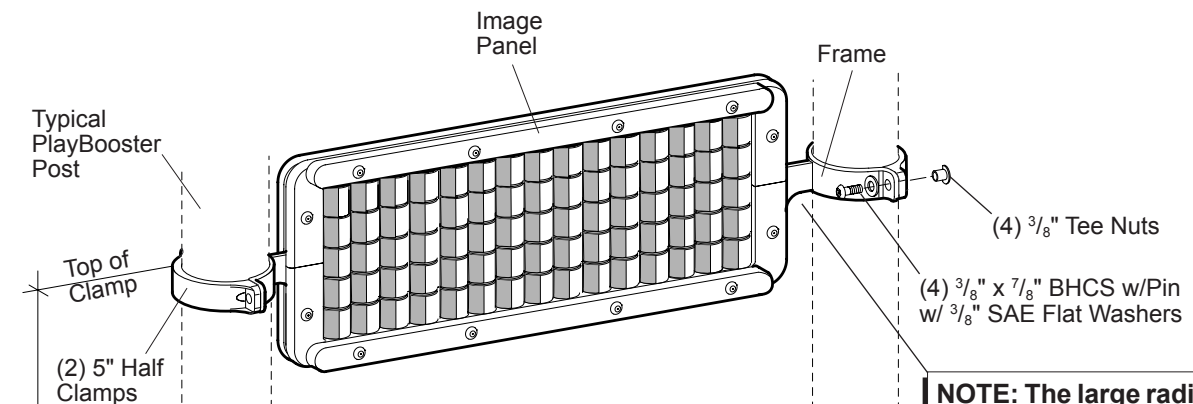
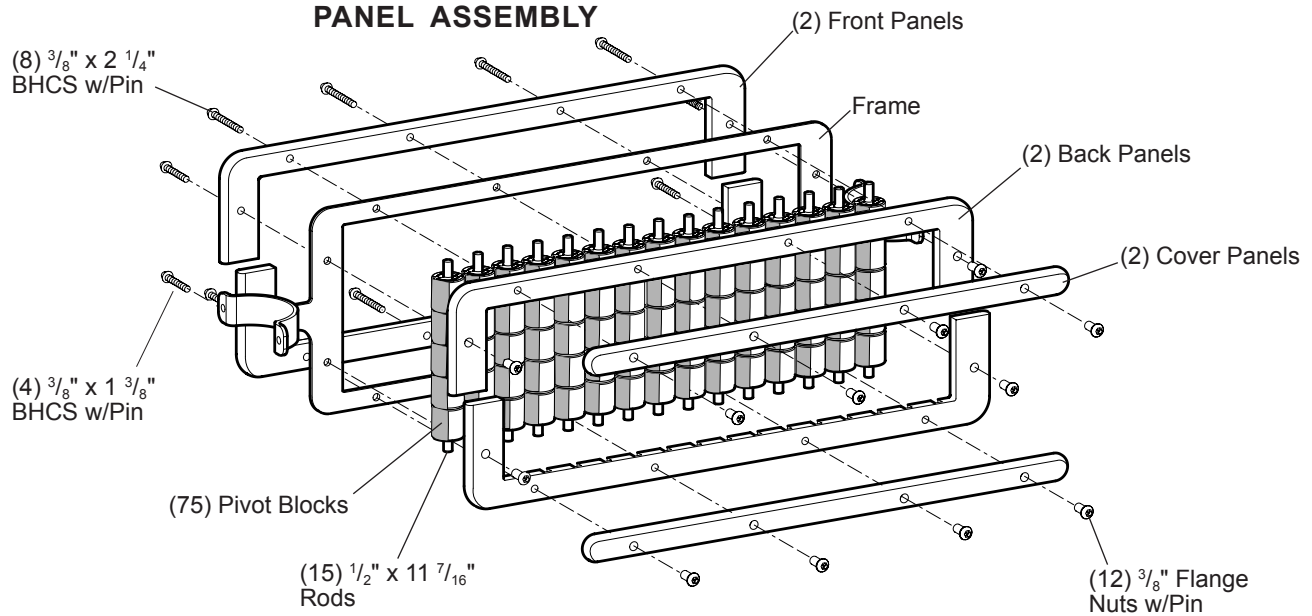
Installation Time: Approx. 1/2 man hour

Weight: 44 lbs.

Installation Instructions

- 1) Assemble panel using frame, pivot blocks, 1/2" x 11 7/16" rods, front panel, back panel, and cover panels as shown. Refer to the Panel Assembly Detail.
- 2) Attach the assembled panel to the posts at the height shown using 5" half clamps, 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" tee nuts. **NOTE:** The large radius on the frame needs to face down, as shown.
- 3) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 4) Install protective surfacing before users are allowed to play on the structure.

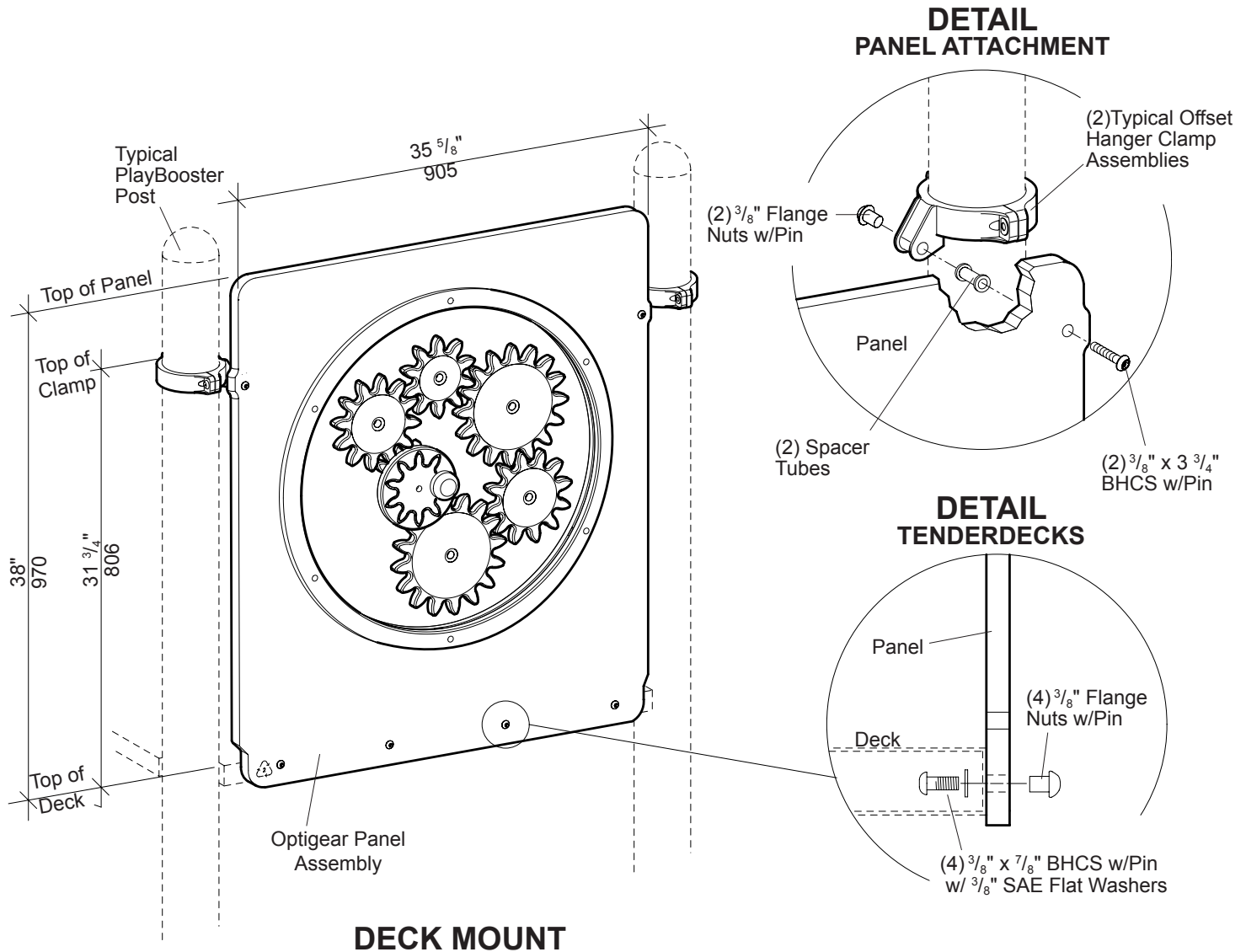
DETAIL PANEL ASSEMBLY



NOTE: The large radius on the frame needs to face down, as shown.

NOTE: If the Image Panel is located on a wheelchair accessible deck, a Curb (Model #191031) is required.

Protective Surfacing



NOTE:
The Optigear Panel is preassembled at the factory.

Parts List

Part#	Description	Qty.
ABOVE DECK		
105327	5" Half Clamp, Specify Color	2
113729	Offset Hanger Clamp, Specify Color	2
113468	Spacer Tube, Specify Color	2
181982	Optigear Panel Assembly, Specify Color	1
100610	1/4" x 5/8" Drive Rivet, AL/SST	2
124900	Tenderdeck Mounting Hardware Package	1
124460	3/8" x 3 3/4" BHCS w/Pin, SST	2
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100351	3/8" Tee Nut, SST	4
100353	3/8" Flange Nut w/Pin, SST	6
100365	3/8" SAE Flat Washer, SST	4
BELOW DECK		
105327	5" Half Clamp, Specify Color	4
113729	Offset Hanger Clamp, Specify Color	4
113468	Spacer Tube, Specify Color	2
113464	Angled Panel Bracket, Specify Color	1
181982	Optigear Panel Assembly, Specify Color	1
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
124947	Below Deck Mounting Hardware Package	1
124460	3/8" x 3 3/4" BHCS w/Pin, SST	2
100195	3/8" x 5/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100351	3/8" Tee Nut, SST	8
100353	3/8" Flange Nut w/Pin, SST	6

Specifications

Optigear Panel Assy.:	(Panels) Two color Permalene®, color specified. (Poly Panel). 236" thick clear polycarbonate, 3/8" threaded rod and 3/16" SST plate.
Angled Panel Brkt:	Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6061-T6 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield®, color specified.
Spacer Tube:	Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.
Clamps:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	Above Deck Approx. 3/4 man hour Below Deck Approx. 1 man hour
Weight:	Above Deck 59 lbs. Below Deck 65 lbs.

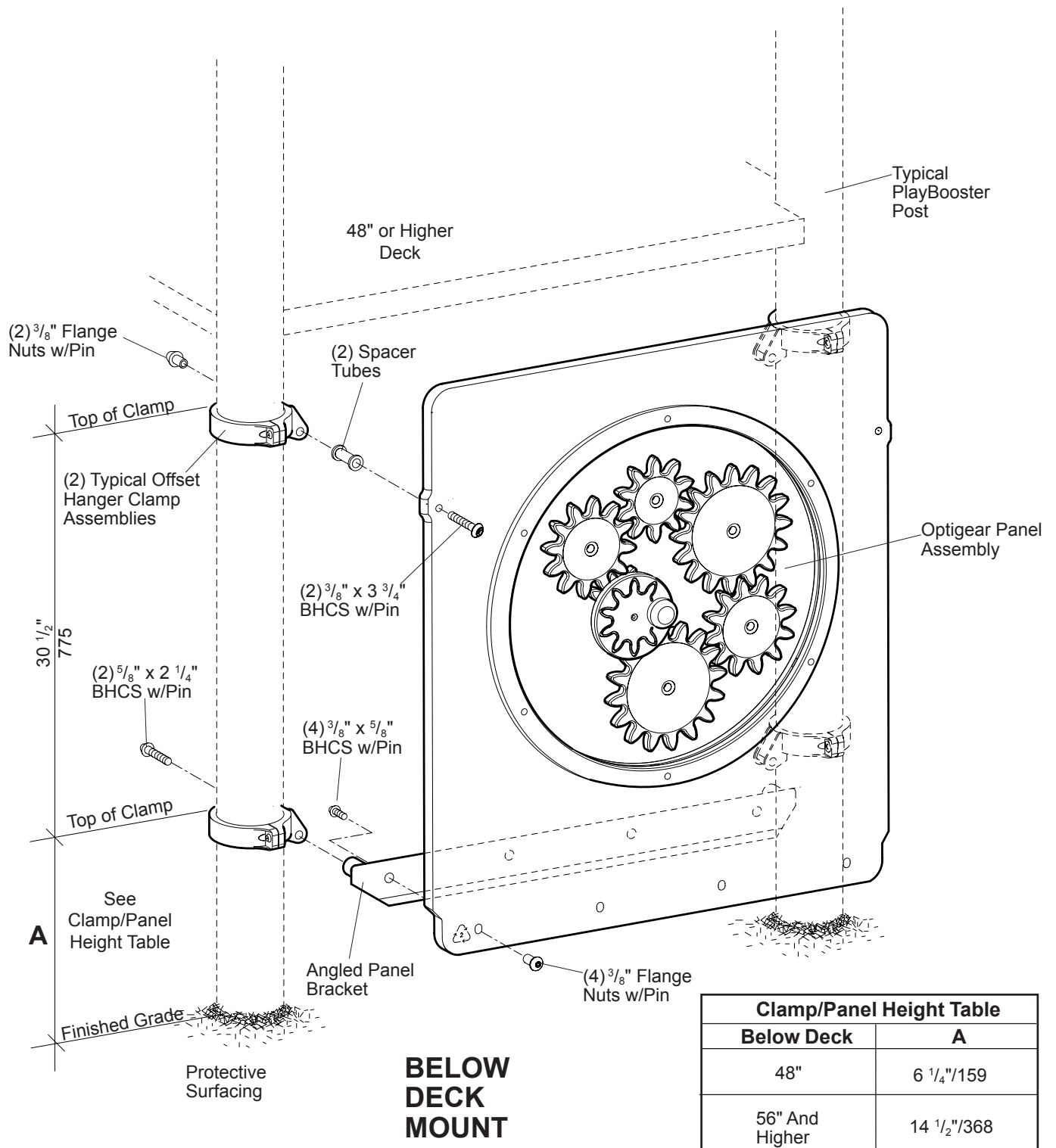
Installation Instructions

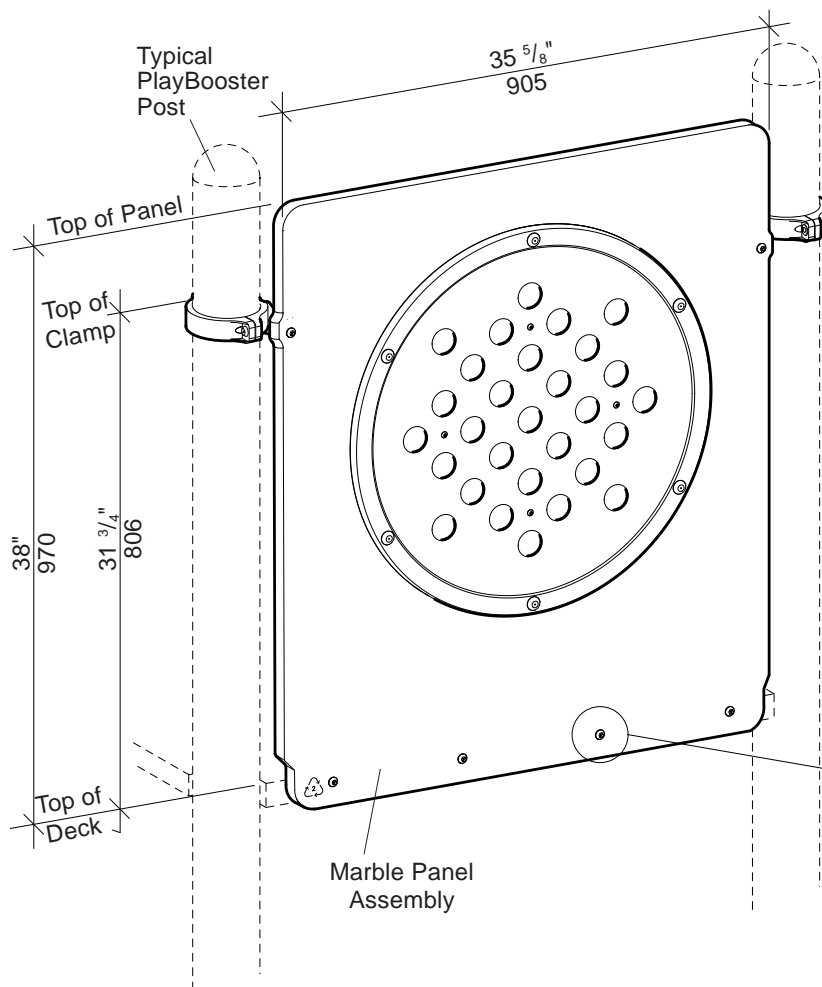
ABOVE DECK (See Sheet 1 of 2)

- 1) Attach panel assembly to the face of the deck using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin. See Detail.
- 2) Attach offset hanger clamp assemblies to posts at height shown, using half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
- 3) Attach panel to offset hanger clamp assemblies, using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. See Panel Attachment Detail.
- 4) Install protective surfacing before users are allowed to play on the structure.

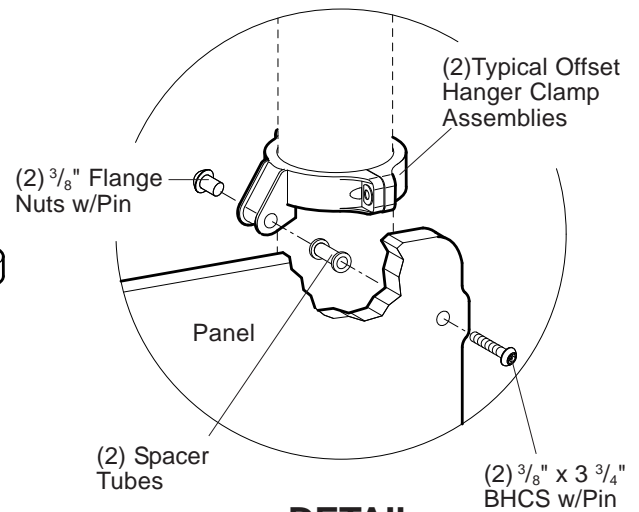
BELOW DECK (See Sheet 2 of 2)

- 1) Attach offset hanger clamp assemblies to posts at height shown, using half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
- 2) Attach angled panel bracket to bottom of panel, using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin. See Below Deck Mount.
- 3) Attach angled panel bracket with panel to offset hanger clamp assemblies, using 5/8" x 2 1/4" BHCS w/pin. See Below Deck Mount.
- 4) Attach top of panel assembly to offset hanger clamp assemblies, using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. See Typical Attachment To Post Detail.
- 5) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Assembly sheet.
- 6) Install protective surfacing before users are allowed to play on the structure.

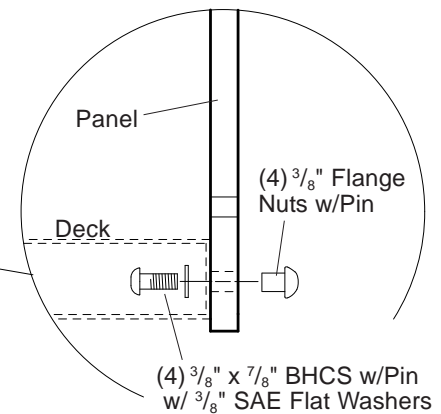




DETAIL PANEL ATTACHMENT



DETAIL TENDERDECKS



DECK MOUNT

NOTE:
The Marble Panel is preassembled at the factory.

Parts List

Part#	Description	Qty.
ABOVE DECK		
105327	5" Half Clamp, Specify Color	2
113729	Offset Hanger Clamp, Specify Color	2
113468	Spacer Tube, Specify Color	2
172698	Marble Panel Assembly, Specify Color	1
100610	1/4" x 5/8" Drive Rivet, AL/SST	2
124900	Tenderdeck Mounting Hardware Package	1
124460	3/8" x 3 3/4" BHCS w/Pin, SST	2
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100351	3/8" Tee Nut, SST	4
100353	3/8" Flange Nut w/Pin, SST	6
100365	3/8" SAE Flat Washer, SST	4
BELOW DECK		
105327	5" Half Clamp, Specify Color	4
113729	Offset Hanger Clamp, Specify Color	4
113468	Spacer Tube, Specify Color	2
113464	Angled Panel Bracket, Specify Color	1
172698	Marble Panel Assembly, Specify Color	1
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
124947	Below Deck Mounting Hardware Package	1
124460	3/8" x 3 3/4" BHCS w/Pin, SST	2
100195	3/8" x 5/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100351	3/8" Tee Nut, SST	8
100353	3/8" Flange Nut w/Pin, SST	6

Specifications

Marble Panel Assy.: (Panels) Two color Permalene®, color specified. (Poly Panel) Fabricated from .236" thick clear polycarbonate. (Marbles) 2" Diameter glass.

Angled Panel Brkt: Weldment comprised of .190" thick 5052 aluminum formed angle with (2) 6061-T6 aluminum threaded tubes 1 1/8" O.D. x 1 1/2" long. Finish: ProShield®, color specified.

Spacer Tube: Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

Offset Hanger Clamp Assembly: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Above Deck Approx. 3/4 man hour
Below Deck Approx. 1 man hour

Weight: Above Deck 64 lbs.
Below Deck 70 lbs.

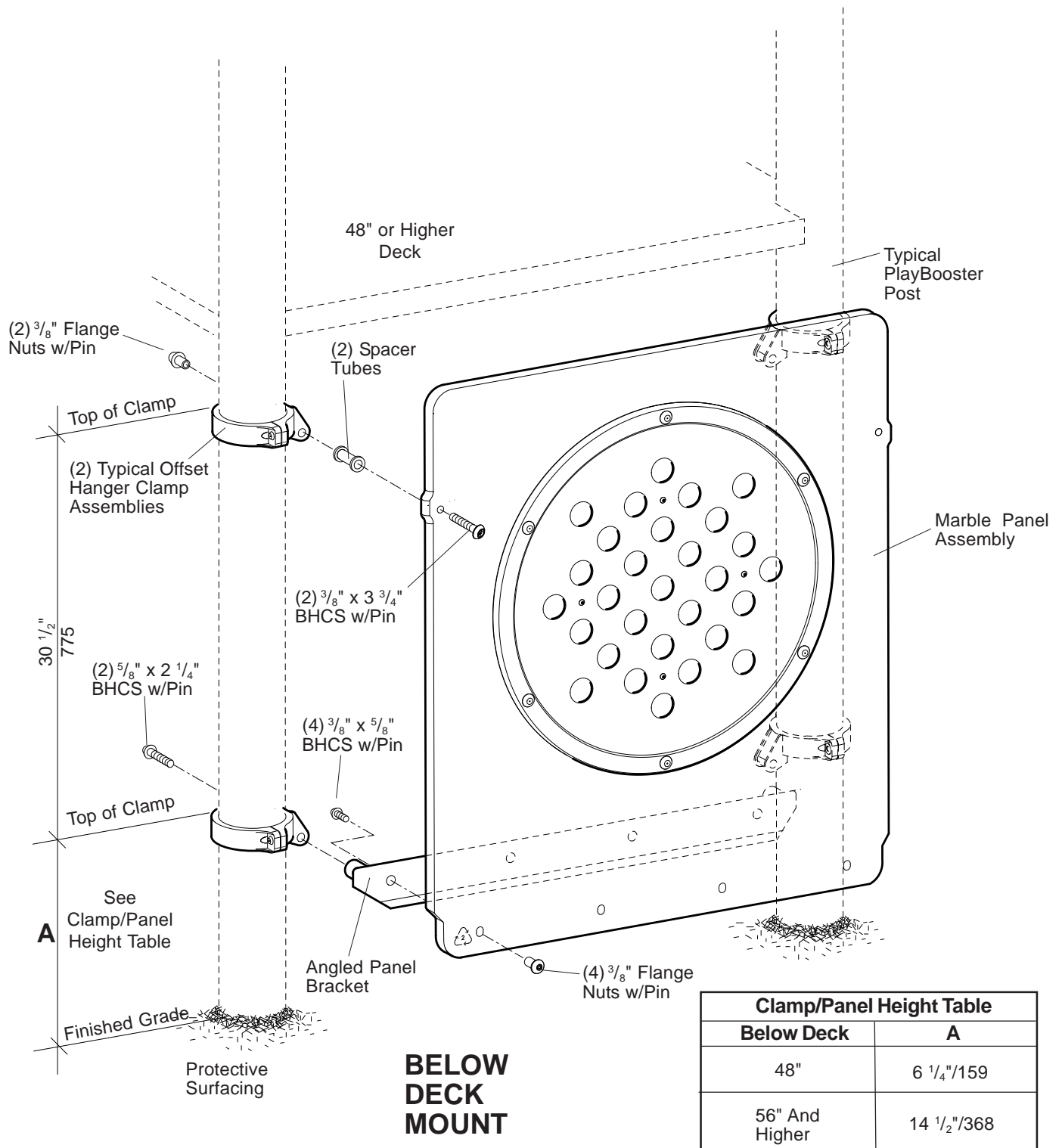
Installation Instructions

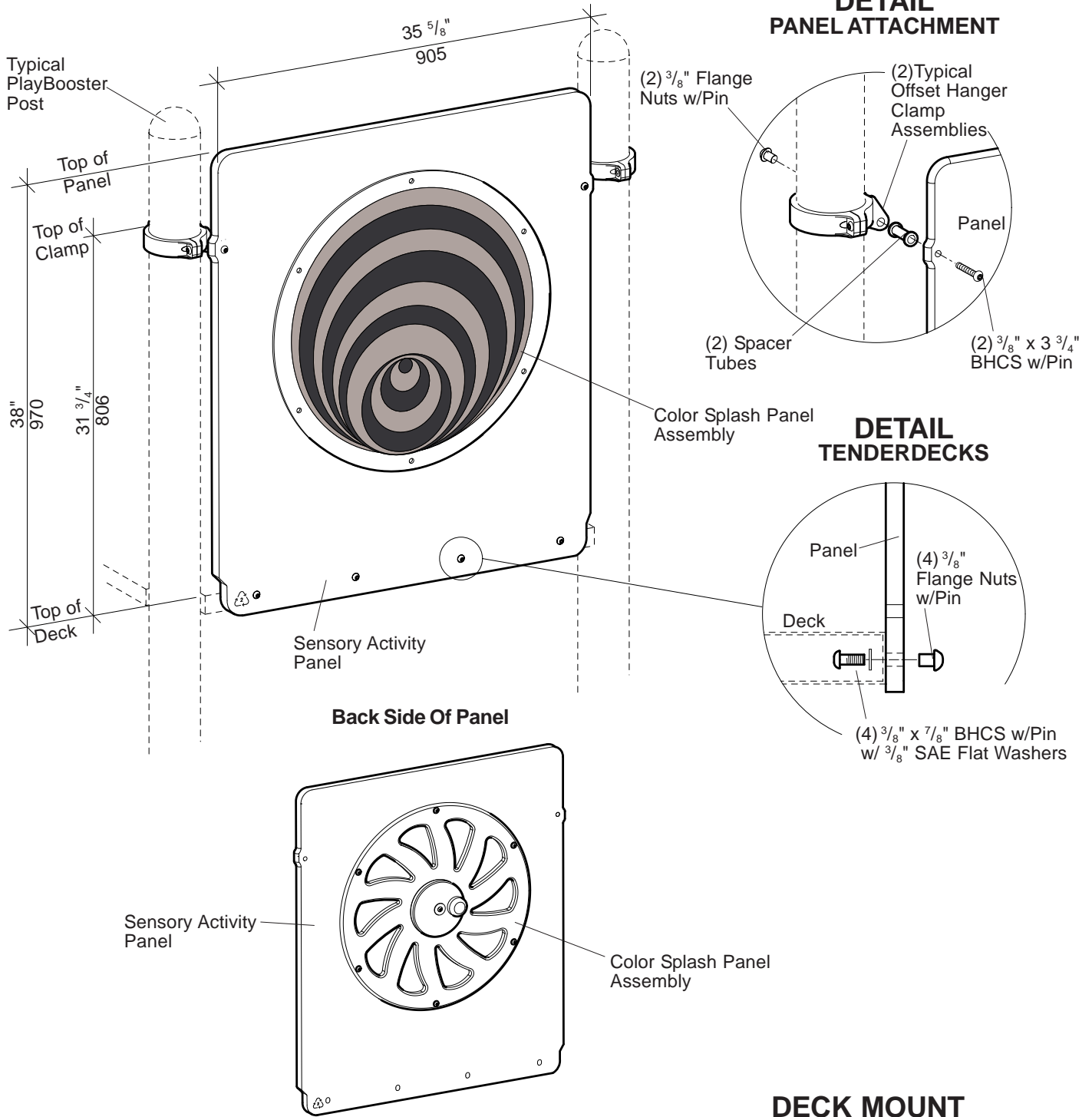
ABOVE DECK (See Sheet 1 of 2)

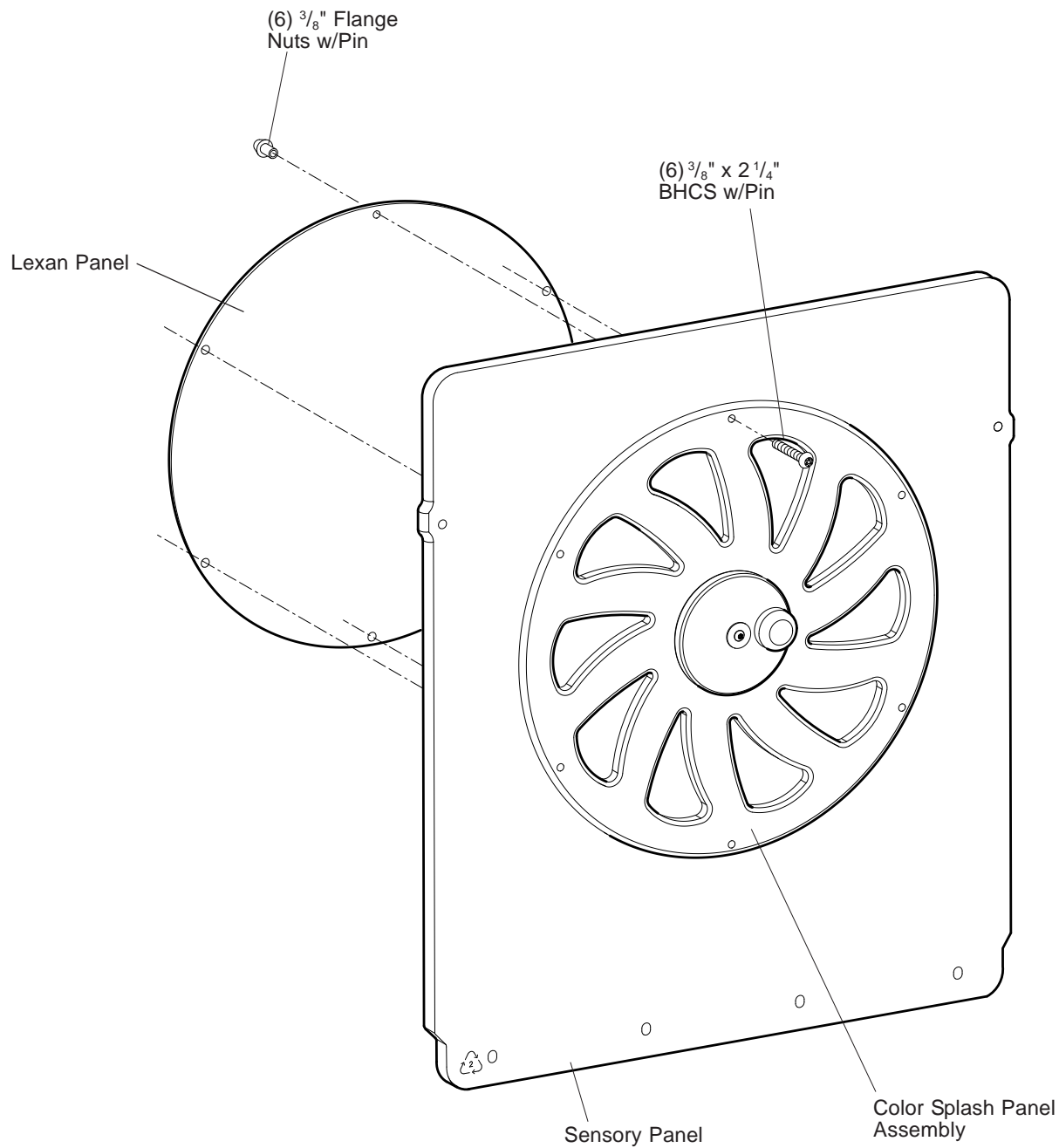
- 1) Attach panel to the face of the deck, using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin. See Detail.
- 2) Attach offset hanger clamp assemblies to posts at height shown, using half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
- 3) Attach panel to offset hanger clamp assemblies, using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. See Panel Attachment Detail.
- 4) Install protective surfacing before users are allowed to play on the structure.

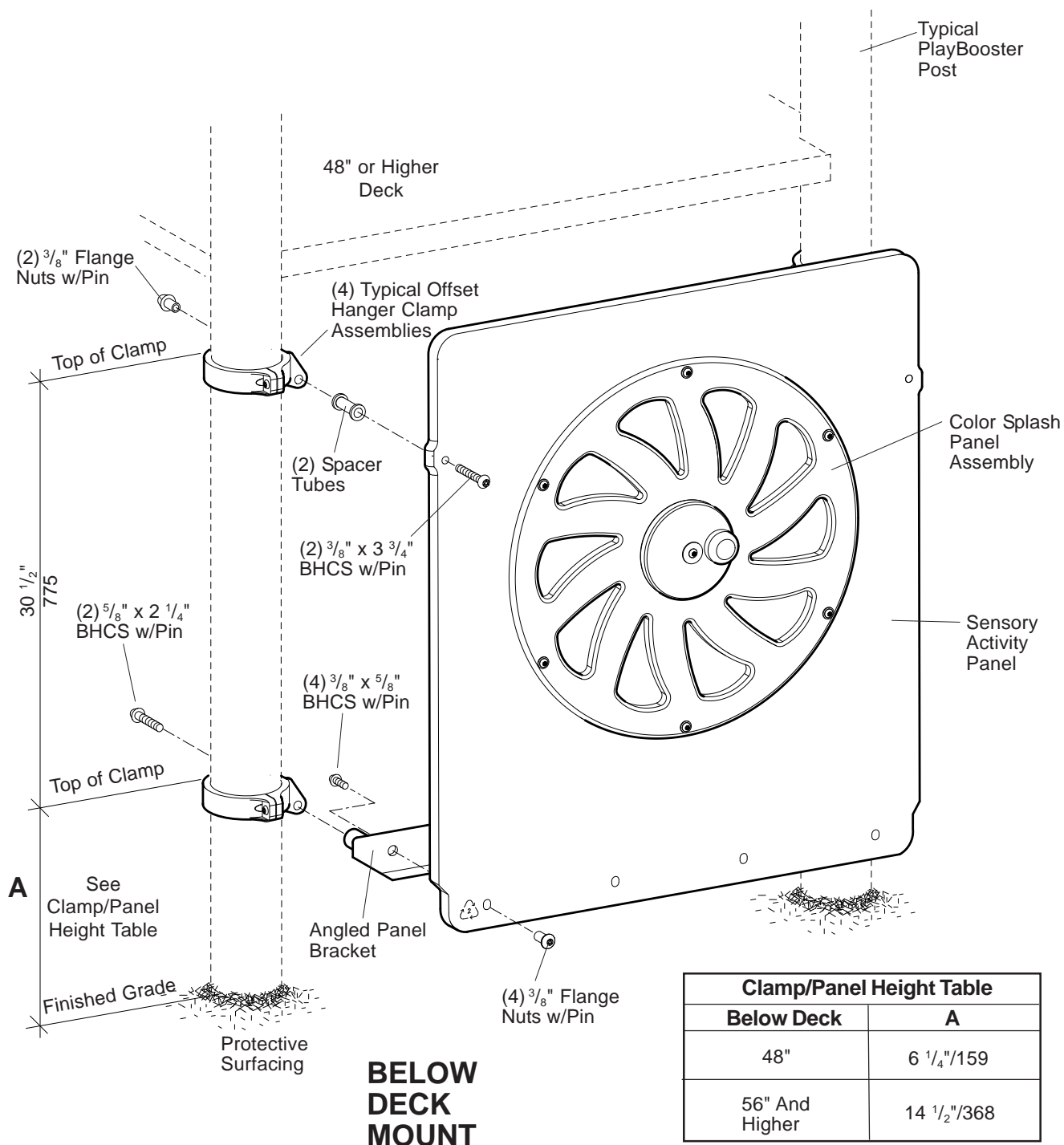
BELOW DECK (See Sheet 2 of 2)

- 1) Attach offset hanger clamp assemblies to posts at height shown, using half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
- 2) Attach angled panel bracket to bottom of panel, using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin. See Below Deck Mount.
- 3) Attach angled panel bracket with panel to offset hanger clamp assemblies, using 5/8" x 2 1/4" BHCS w/pin. See Below Deck Mount.
- 4) Attach top of panel to offset hanger clamp assemblies, using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. See Typical Attachment To Post Detail.
- 5) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Assembly sheet.
- 6) Install protective surfacing before users are allowed to play on the structure.









Parts List

Part#	Description	Qty.
ABOVE DECK		
100610	1/4" x 3/8" Drive Rivet, AL/SST	2
105327	5" Half Clamp, Specify Color	2
113729	Offset Hanger Clamp, Specify Color	2
113468	Spacer Tube, Specify Color	2
173727	Sensory Activity Panel, Specify Color	1
178123	Color Splash Panel Assembly, Specify Color	1
124900 Tenderdeck Mounting Hardware Package		
124460	3/8" x 3 3/4" BHCS w/Pin, SST	2
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100351	3/8" Tee Nut, SST	4
100353	3/8" Flange Nut w/Pin, SST	6
100365	3/8" SAE Flat Washer, SST	4
178349 Color Splash Panel Hardware Package		
100199	3/8" x 2 1/4" BHCS w/Pin, SST	6
100353	3/8" Flange Nut w/Pin, SST	6
BELOW DECK		
100610	1/4" x 3/8" Drive Rivet, AL/SST	4
105327	5" Half Clamp, Specify Color	4
113729	Offset Hanger Clamp, Specify Color	4
113468	Spacer Tube, Specify Color	2
113464	Angled Panel Bracket, Specify Color	1
173727	Sensory Activity Panel, Specify Color	1
178123	Color Splash Panel Assembly, Specify Color	1
124947 Below Deck Mounting Hardware Package		
124460	3/8" x 3 3/4" BHCS w/Pin, SST	2
100195	3/8" x 3/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100351	3/8" Tee Nut, SST	8
100353	3/8" Flange Nut w/Pin, SST	6
178349 Color Splash Panel Hardware Package		
100199	3/8" x 2 1/4" BHCS w/Pin, SST	6
100353	3/8" Flange Nut w/Pin, SST	6

Specifications

Color Splash Panel Assembly:	Assembly comprised of (Permalene® Panels), color specified. (Lexan Panel) 1/4" (6,35 mm) thick x 26 3/4" (679,45 mm) diameter. (Acrylic Panel) 1/8" (3,18 mm) thick x 26 3/4" (679,45 mm) diameter clear. (Color Wheel) .1875" (4,76 mm) thick x 23 7/16" (595,30 mm) diameter aluminum sheet. Finish: ProShield®, image is transferred into paint by the process of infusion. (Shaft) stainless steel. (Thrust Oilite Bearing) .125" (3,18 mm) thick x 2.875" (73,03 mm) diameter. (Sleeve Oilite Bearing) 1.25" (31,75 mm) diameter x .750" (19,05 mm) long.
Angled Panel Brkt:	Weldment comprised of .190" (4,82 mm) thick 5052 aluminum formed angle with (2) 6061-T6 aluminum threaded tubes 1 1/8" (28,58 mm) O.D. x 1 1/2" (38,1 mm) long. Finish: ProShield, color specified.

Sensory Activity

Panel: Permalene panel measures 35 5/8" (904,87 mm) wide x 41" (1041 mm) high, color specified.

Clamp: Cast aluminum. Finish: ProShield, color specified.

Spacer Tube: Made from 6061-T6 aluminum 7/8" (22,22 mm) O.D. x 1 11/16" (42,85 mm) long. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Above Deck Approx. 3/4 man hour
Below Deck Approx. 1 man hour

Weight: Above Deck 83 lbs.
Below Deck 89 lbs.

Installation Instructions

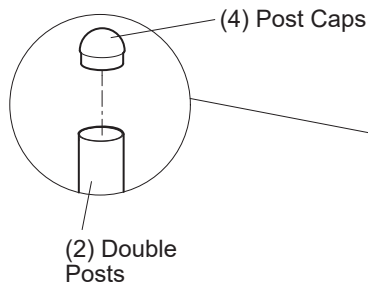
ABOVE DECK (See Sheet 1 of 2)

- 1) Attach color splash panel assembly to panel, using 3/8" x 2 1/4" BHCS w/pin and 3/8" flange nuts w/pin, as shown. **NOTE:** Remove protective layer from lexan before installation.
- 2) Attach panel to the face of the deck, using 3/8" x 7/8" BHCS w/pin with 3/8" SAE flat washers and 3/8" flange nuts w/pin. See Detail.
- 3) Attach offset hanger clamp assemblies to posts at height shown, using 5" half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
- 4) Attach panel to offset hanger clamp assemblies, using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. See Panel Attachment Detail.
- 5) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 6) Install protective surfacing before users are allowed to play on the structure.

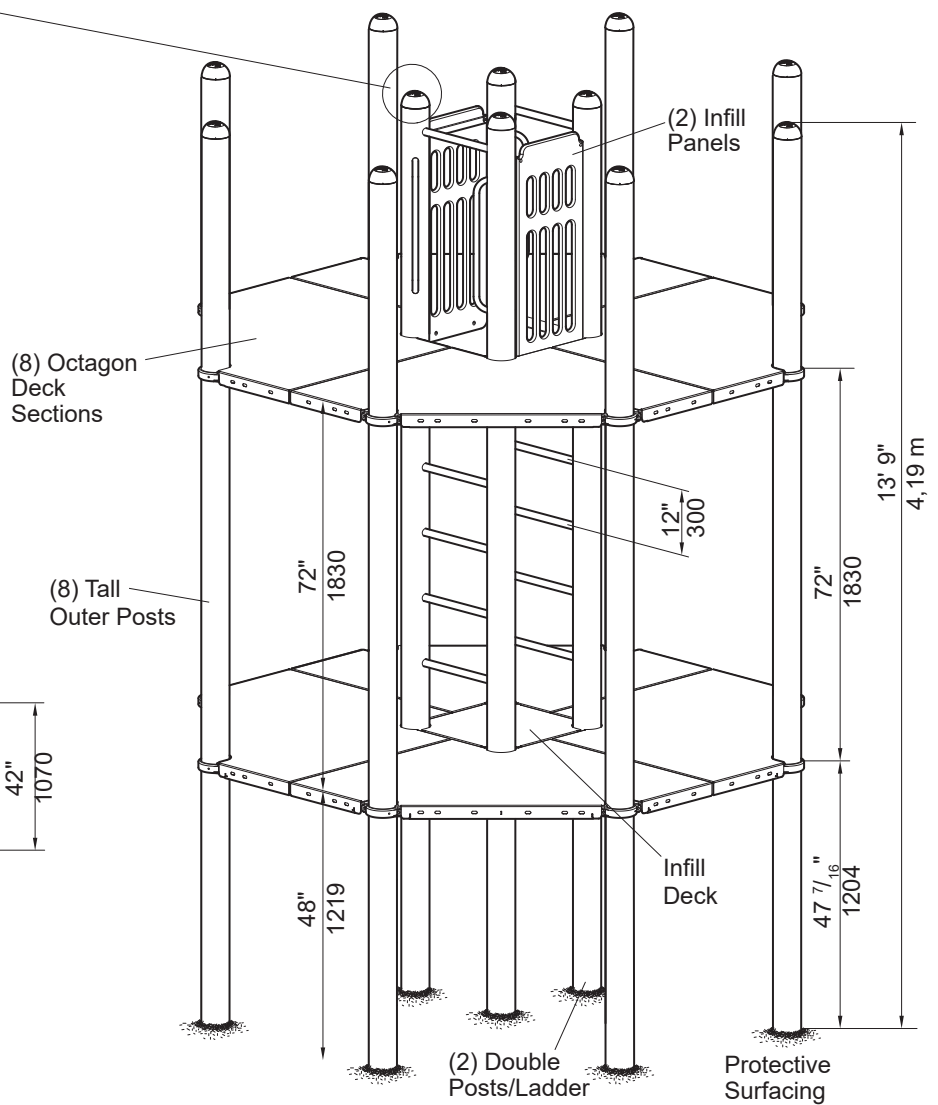
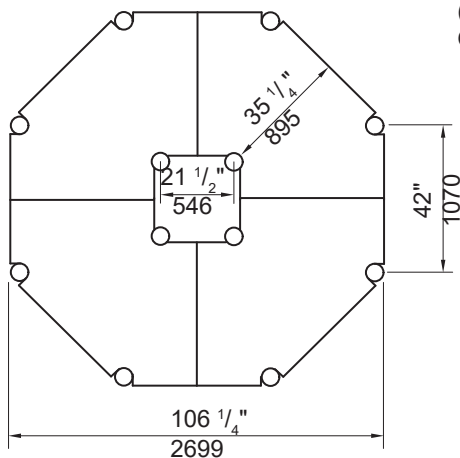
BELOW DECK (See Sheet 2 of 2)

- 1) Attach color splash panel assembly to panel, using 3/8" x 2 1/4" BHCS w/pin and 3/8" flange nuts w/pin, as shown. **NOTE:** Remove protective layer from lexan before installation.
- 2) Attach offset hanger clamp assemblies to posts at height shown, using 5" half clamps and 3/8" x 1 1/8" BHCS w/pin with 3/8" tee nuts. Refer To The Typical Offset Hanger Clamp Spec Sheet.
- 3) Attach angled panel bracket to bottom of panel, using 3/8" x 5/8" BHCS w/pin and 3/8" flange nuts w/pin. See Panel Attachment Detail.
- 4) Attach angled panel bracket with panel to offset hanger clamp assemblies, using 5/8" x 2 1/4" BHCS w/pin. See Below Deck Mount.
- 5) Attach top of panel to offset hanger clamp assemblies, using 3/8" x 3 3/4" BHCS w/pin, spacer tubes and 3/8" flange nuts w/pin. See Typical Attachment To Post Detail.
- 6) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 7) Install protective surfacing before users are allowed to play on the structure.

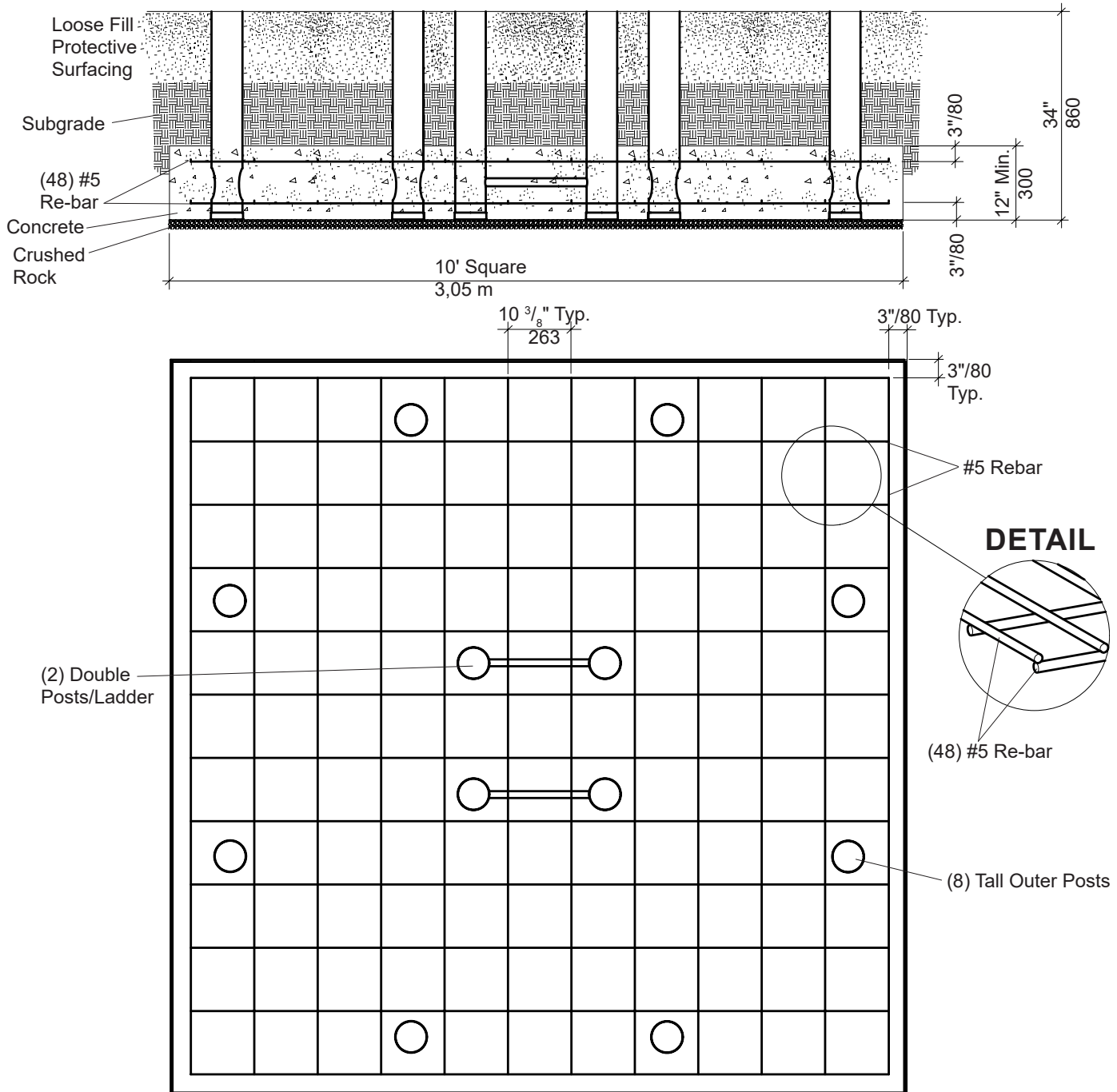
DETAIL POST CAP ATTACHMENT



PLAN VIEW



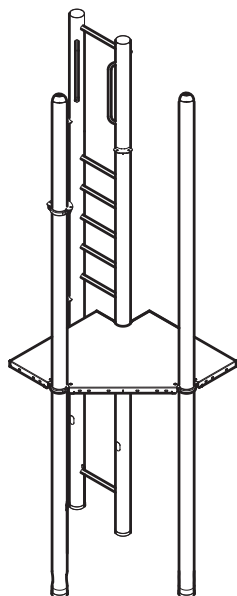
PLAN VIEW/FOOTING LAYOUT



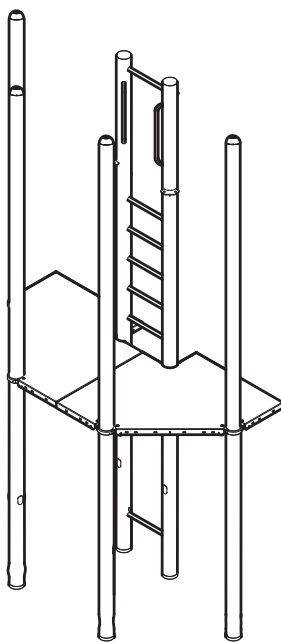
NOTE: Place #5 re-bar 3" up from the bottom and 3" down from the top of the concrete, as shown. Rebar should be placed 3" in from the edge of the concrete on all sides and approximately 10 ³/₈" on center.

DETAIL
MAINSTRUCTURE ASSEMBLY SEQUENCE

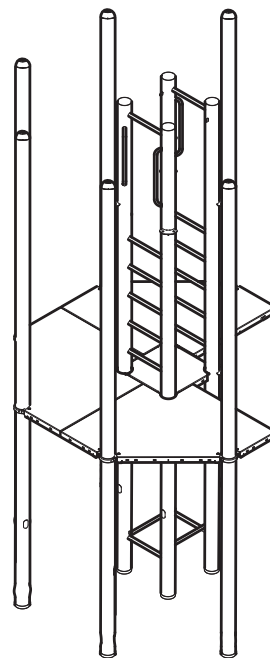
Step #1



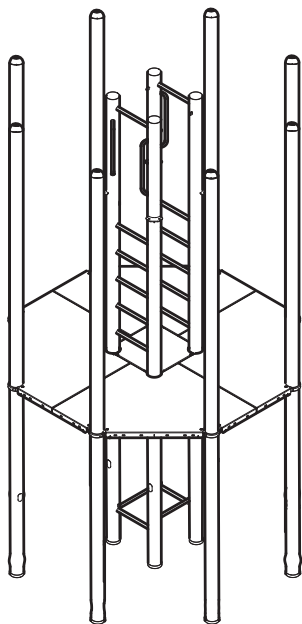
Step #2



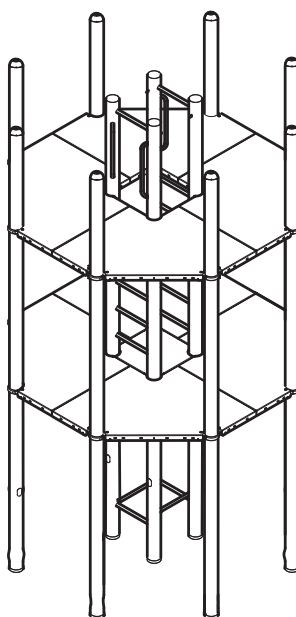
Step #3



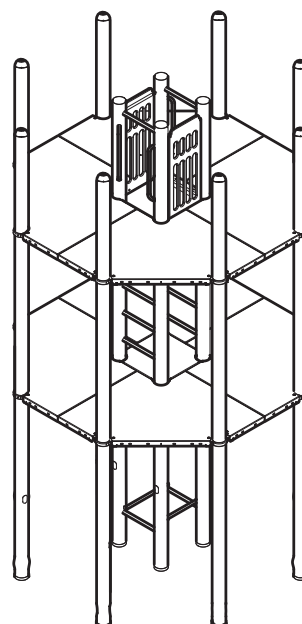
Step #4

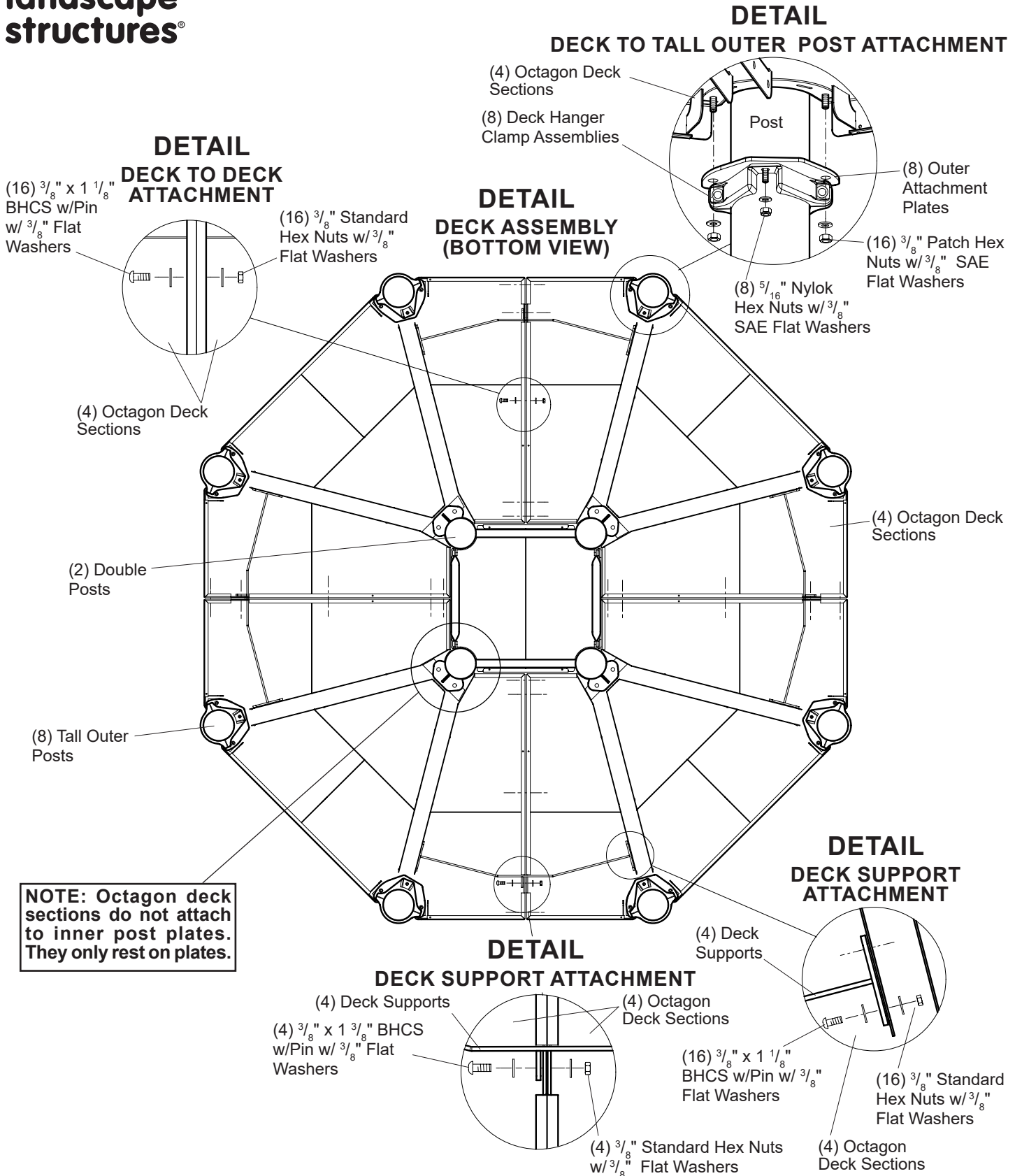


Step #5

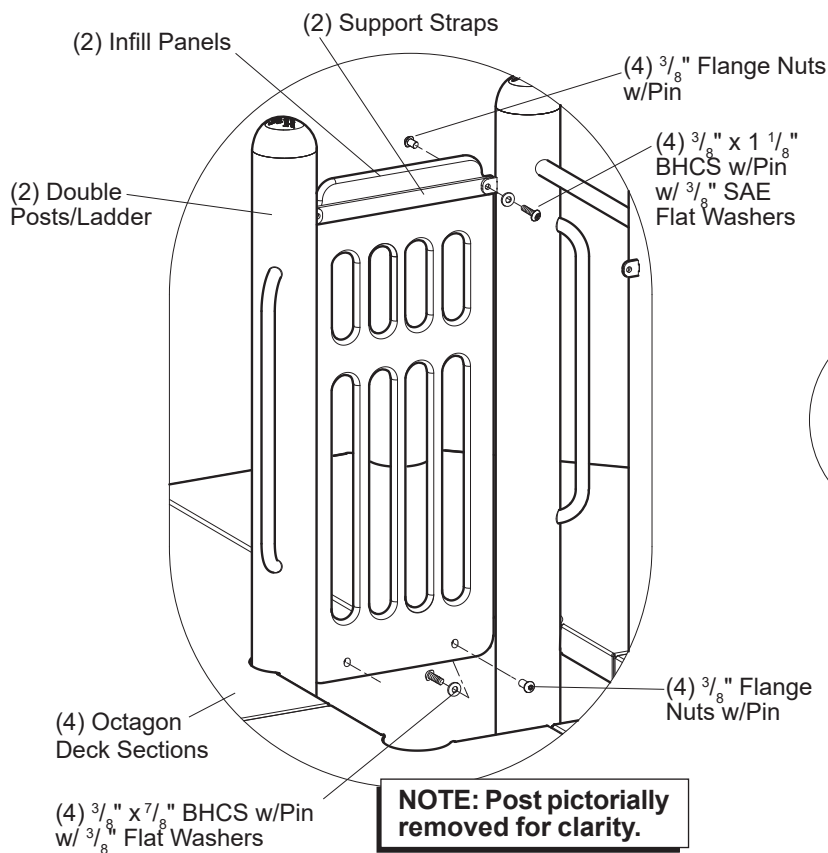


Step #6

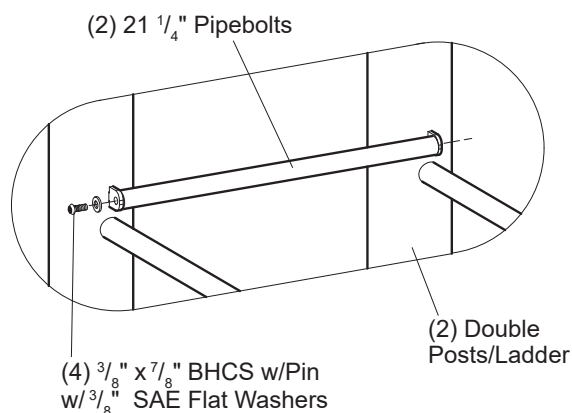




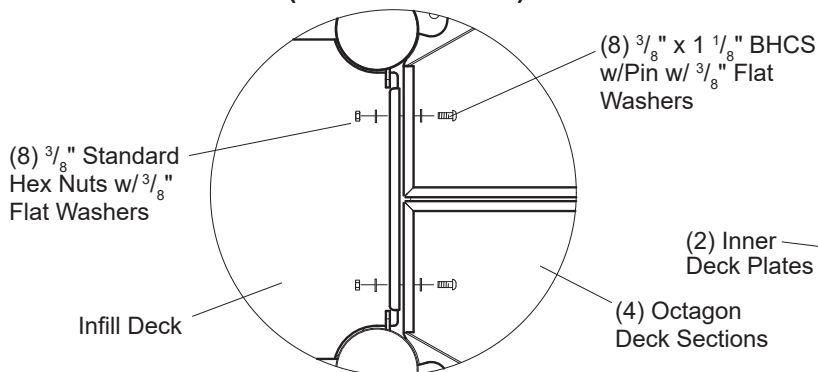
DETAIL INFILL PANEL ATTACHMENT



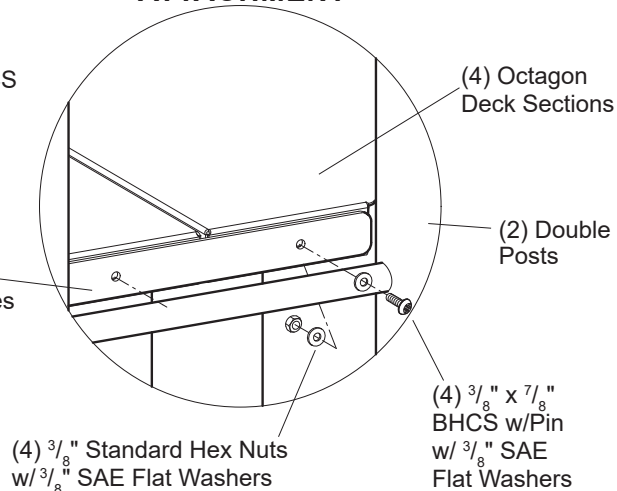
DETAIL PIPEBOLT ATTACHMENT



DETAIL INFILL DECK ATTACHMENT (BOTTOM VIEW)



DETAIL INNER UPPER DECK PLATE ATTACHMENT





PlayOdyssey 188689 PlayOdyssey® 10' Tower, w/o Roof

Parts List

Part#	Description	Qty.
100610	1/4" x 5/8" Drive Rivet, Al/SST	16
105327	5" Half Clamp, Specify Color	16
106022	Deck Hanger Clamp, Specify Color	16
128503	Infill Panel, Specify Color	2
136366	Infill Deck, Specify Color	1
149182	Support Strap, Specify Color	2
152982	Octagon Deck Section, Specify Color	8
165206	Outer Attachment Plate, Specify Color	16
185297	Double Post/Ladder, (DB), Specify Color	2
185298	Tall Outer Post, (DB), Specify Color	8
165501	Deck Support, Specify Color	8
165725	21 1/4" Pipebolt, Specify Color	2
165726	Inner Deck Plate, Specify Color	2
165895	Re-bar #5 x 114" long	48
161236	Post Cap, Specify Color	4
165599	PlayOdyssey Tower Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	12
100198	3/8" x 1 1/8" BHCS w/Pin, SST	108
100321	3/8" Hex Patch Nut, SST	32
100327	3/8" Standard Hex Nut, SST	84
100329	5/16" Nylok Hex Nut, SST	16
100351	3/8" T-Nut, SST	32
100353	3/8" Flange Nut w/Pin, SST	8
100362	3/8" Flat Washer, SST	164
100365	3/8" SAE Flat Washer, SST	64
113027	3/8" x 1 3/8" BHCS w/Pin, SST	8

Specifications

Double Post:	Weldment comprised of 5" O.D. x 11 GA (.120") galvanized steel tubing, 1.029" O.D. RS-20 (.070" - .080") galvanized steel tubing, 1.315" O.D. RS-20 (.080" - .090") galvanized steel tubing and 1/4" x 1 1/4" HRPO flat steel. Finish: ProShield®, color specified.
Outer Post:	Fabricated from 5" O.D. x 11 GA (.120") galvanized steel tubing and die cast 369.1 aluminum post cap. Finish: ProShield, color specified.
Octagon Deck:	Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. Deck face has (4) slotted holes for face mounting components. The combined finished size measures 2 5/8" x 106 1/4" x 106 1/4". Finish: TenderTuff®, color specified.
Post Cap:	Cast aluminum. Finish: ProShield, color specified.
Re-bar #5:	5/8" Diameter.
Pipebolt:	Fabricated from 1.125" O.D. 6061-T6 aluminum tube, with 3/8" internal threads.
Infill Deck:	Flange formed from 12 GA (.105") sheet steel conforming to ASTM A1011. Standing surface is perforated with 5/16" diameter holes. The finished size measures 2 5/8" x 24 3/8" x 24 3/8". Finish: TenderTuff, color specified.
Infill Panel:	Solid color Permalene®, color specified.
Inner Deck Plate:	Fabricated from 1/4" HRPO steel sheet. Finish: ProShield, color specified.
Support Strap:	Fabricated from 1/4" x 1 1/4" HRPO flat steel. Finish:

ProShield, color specified.

Clamps: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: Approx. 34 hours with 4 people minimum

Concrete Req.: Approx. 3.70 cu. yds.

Actual Size: 106 1/4" x 106 1/4" (2,70 m x 2,70 m)

Weight: 3048 lbs.

Fall Height: 120" (3,04 m) Deck Height

Installation Instructions

NOTE: To lift deck sections, a "Lull" type material handler is recommended.

- 1) Dig footing, and level ground as shown. Refer to the Plan View/Footing Layout.

Deck/Double Post Assembly

- 2) **Step #1** - Attach deck hanger clamps to outer posts at height shown, using 5" half clamps, $\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/pin and $\frac{3}{8}$ " tee nuts. Refer to the Offset Hanger Clamp Assembly Spec Sheet.
- 3) Attach outer attachment plates to deck hanger clamps, using $\frac{5}{16}$ " nylok hex nuts with $\frac{3}{8}$ " SAE flat washers. Refer to Detail.
- 4) Stand double post/ladder and (2) tall outer posts upright in footing hole. **NOTE:** Rope may be used to tie off the double post. The use of rope will help keep the double post in plumb position, while attaching decks. Tie a rope (not supplied) on each side of the top ladder rung. The rope should be long enough to attach to a ground stake (not supplied). When the double post is in plumb position, pull the ropes tight, and attach to ground stakes.
- 5) Lift deck section and place onto outer attachment plates, and double post plate. Attach deck section to tall outer post attachment plates, using $\frac{3}{8}$ " patch hex nuts with $\frac{3}{8}$ " SAE flat washers. Refer to Detail.
- 6) **Step #2** - Stand (2) tall outer posts upright in footing hole. Lift deck section and place onto tall outer post attachment plates, and double post plate. Attach deck section to tall outer post attachment plates, using $\frac{3}{8}$ " patch hex nuts with $\frac{3}{8}$ " SAE flat washers. Refer to Detail.
- 7) **Step #3** - Attach infill deck to deck sections, using $\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/pin with $\frac{3}{8}$ " flat washers and $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " flat washers. Refer to the Infill Deck Attachment Detail.
- 8) Stand remaining double post and (2) tall outer posts upright in footing hole. Lift deck section and place onto tall outer post attachment plates, and double post plate. Attach deck section to tall outer post attachment plates, using $\frac{3}{8}$ " patch hex nuts with $\frac{3}{8}$ " SAE flat washers. Refer to Detail.
- 9) Attach 21 $\frac{1}{4}$ " pipebolts to double posts, using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin and $\frac{3}{8}$ " SAE flat washers. Refer to the Pipebolt Attachment Detail.
- 10) **Step #4** - Stand remaining tall outer posts upright in footing hole. Lift deck section and place onto tall outer post attachment plates, and double post plate. Attach deck section to tall outer post attachment plates, using $\frac{3}{8}$ " patch hex nuts with $\frac{3}{8}$ " SAE flat washers. Refer to Detail.
- 11) Attach infill deck to deck sections, using $\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/pin with $\frac{3}{8}$ " flat washers and $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " flat washers. Refer to the Infill Deck Attachment Detail.
- 12) Attach (4) deck sections together, using $\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/pin with $\frac{3}{8}$ " flat washers and $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " flat washers. Refer to the Deck Assembly Detail.
- 13) Attach (4) deck supports to decks, using $\frac{3}{8}$ " x $1\frac{3}{8}$ " BHCS w/pin, $\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/pin, $\frac{3}{8}$ " flat washers and $\frac{3}{8}$ " standard hex nuts. Refer to the Deck Assembly Detail.
- 14) **Step #5** - Attach remaining (4) deck sections to tall outer post attachment plates, using $\frac{3}{8}$ " patch hex nuts with $\frac{3}{8}$ " SAE flat washers. Refer to Detail.

- 15) **Step #6** - Attach infill panels to double posts, using support straps, $\frac{3}{8}$ " flange nuts and $\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS w/pin with $\frac{3}{8}$ " SAE flat washers. Refer to the Infill Panel Attachment Detail.

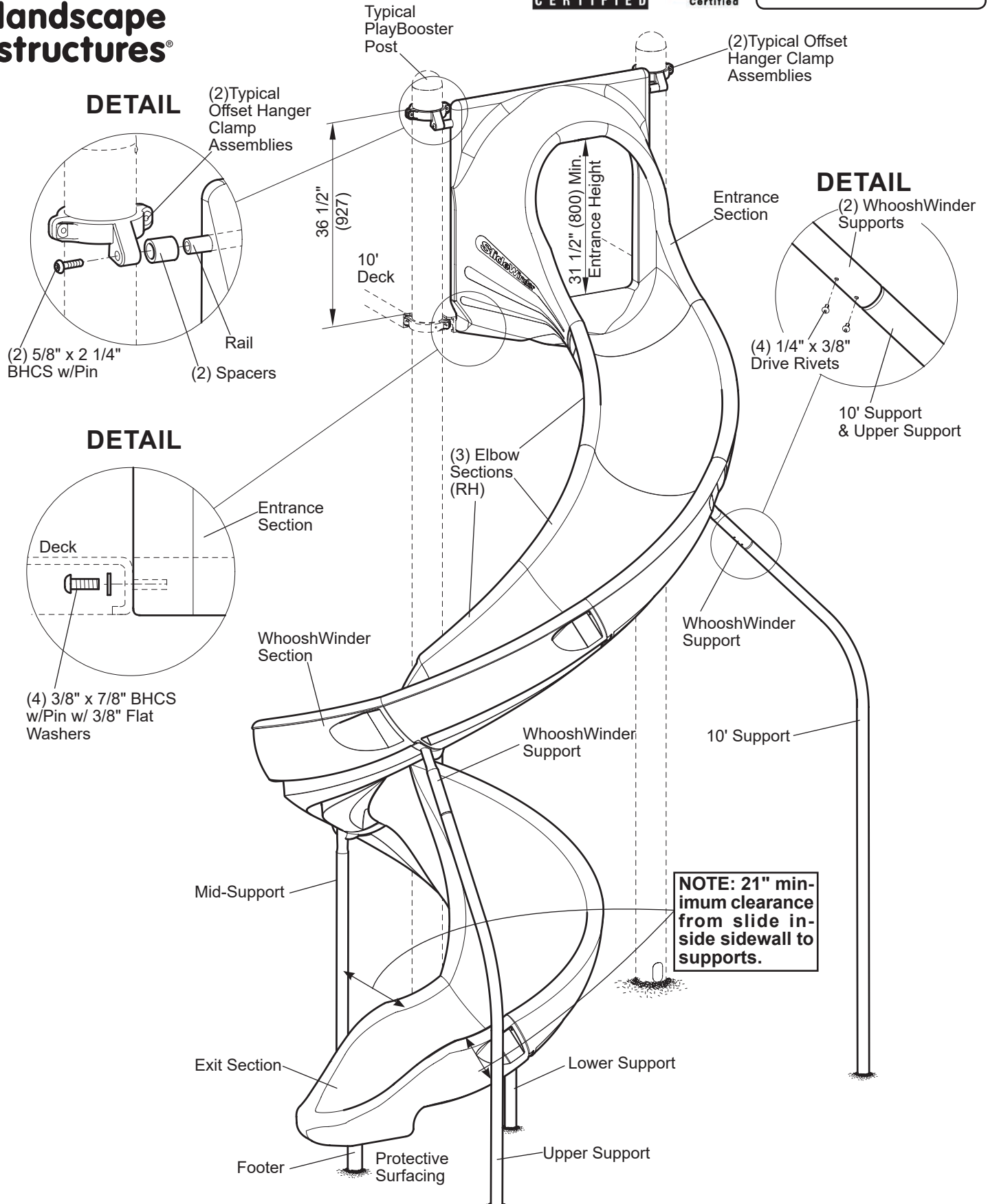
- 16) Attach (2) inner upper deck plates to deck sections, using $\frac{3}{8}$ " x $\frac{7}{8}$ " BHCS w/pin with $\frac{3}{8}$ " SAE flat washers and $\frac{3}{8}$ " standard hex nuts with $\frac{3}{8}$ " SAE flat washers. Refer to the Inner Deck Plate Attachment Detail.

Post Cap Assembly

- 17) Insert the post caps into the double posts.

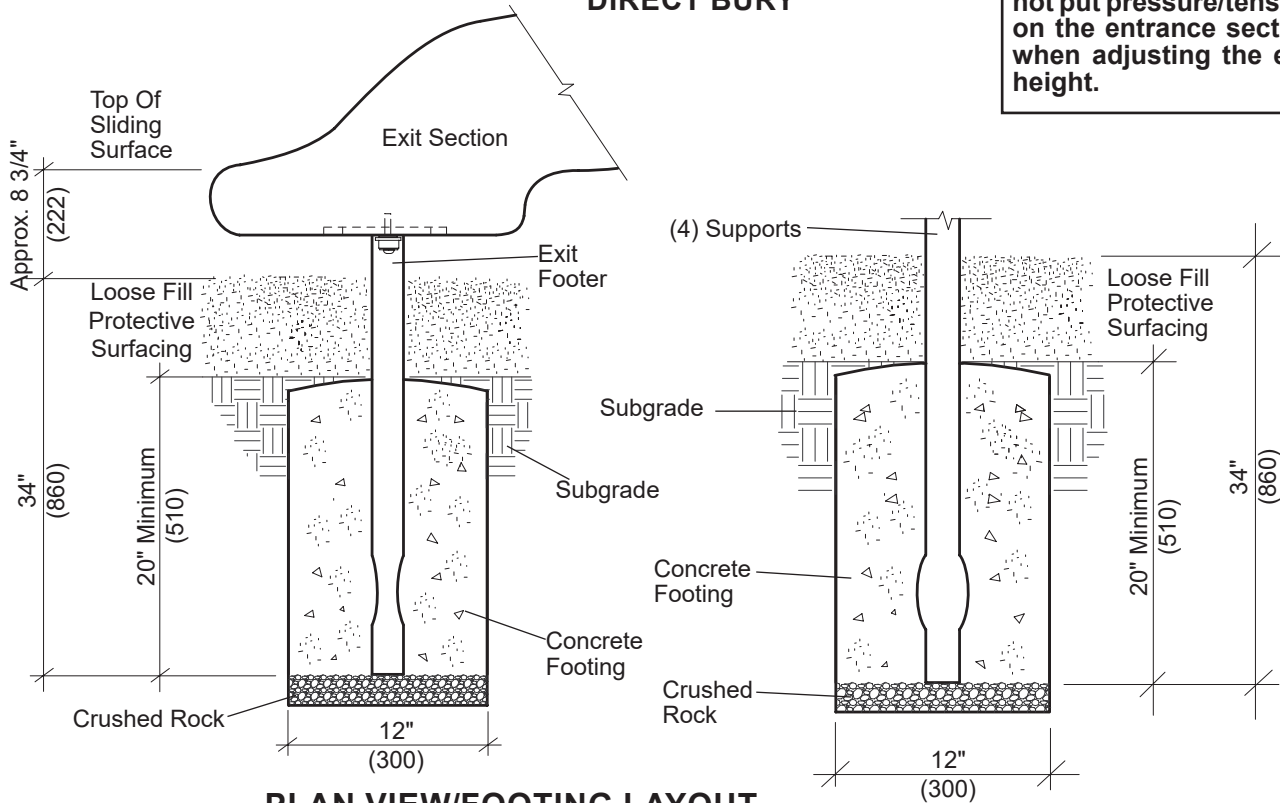
Finishing Steps

- 18) Install $\frac{1}{4}$ " x $\frac{5}{8}$ " drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 19) With posts plumb and decks level, pour concrete footing. Let concrete cure for 72 hours before use. Refer to the Plan View/Footing Layout. **NOTE:** Make sure Re-rod is placed in concrete as shown.
- 20) Install enclosures/play components as shown on your site drawings.
- 21) Install protective surfacing before users are allowed to play on the structure.

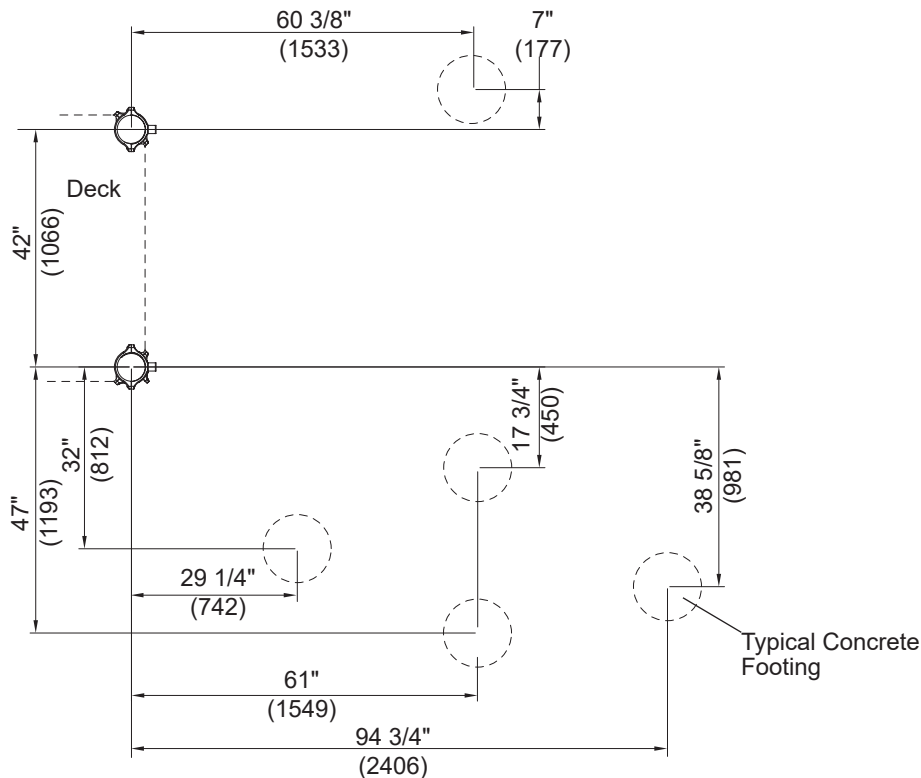


**DETAIL
DIRECT BURY**

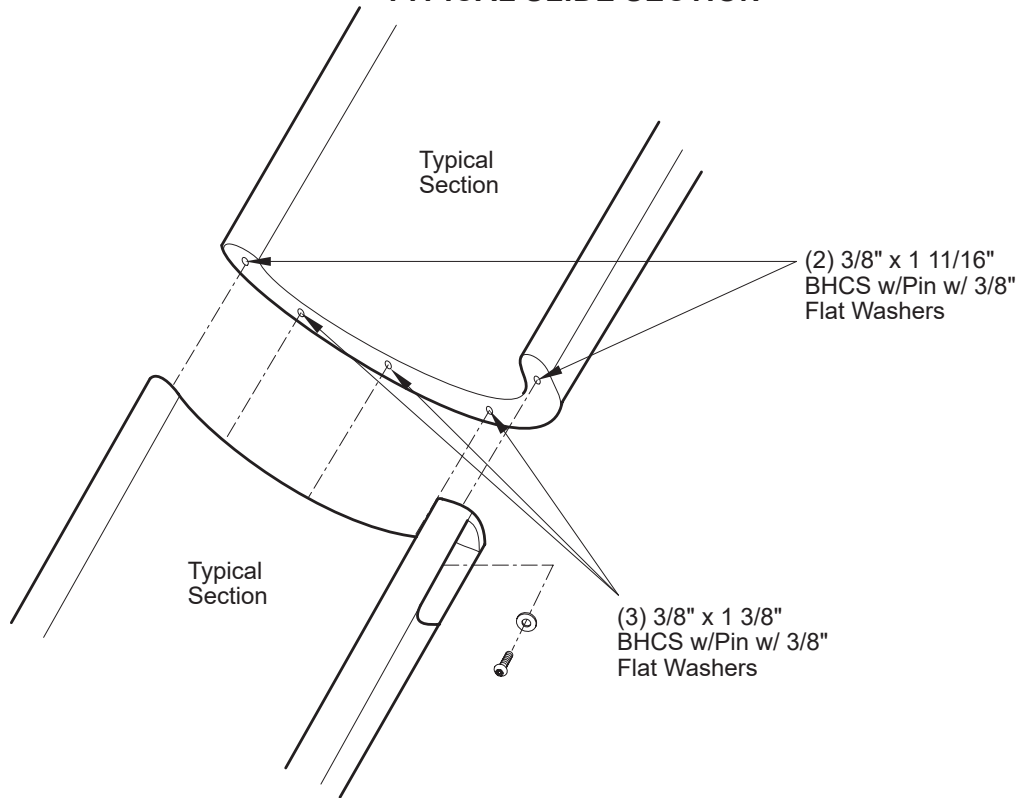
NOTE: Exit Heights may vary if the protective surfacing is not level. Do not put pressure/tension on the entrance section when adjusting the exit height.



PLAN VIEW/FOOTING LAYOUT

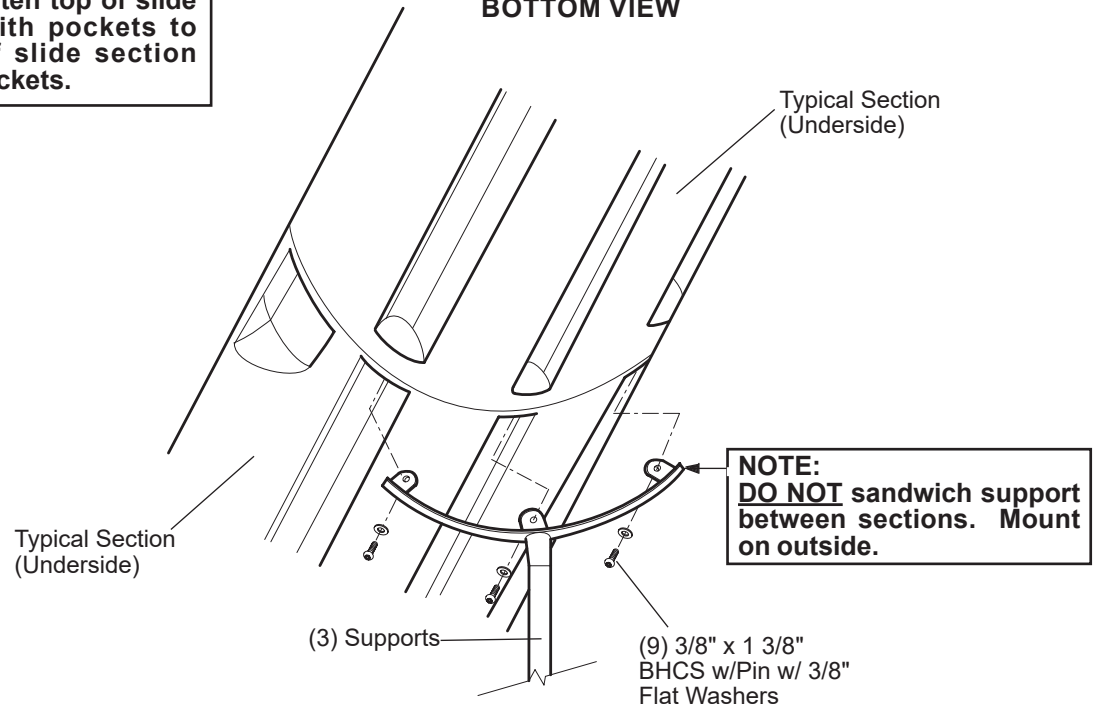


**DETAIL
TYPICAL SLIDE SECTION**



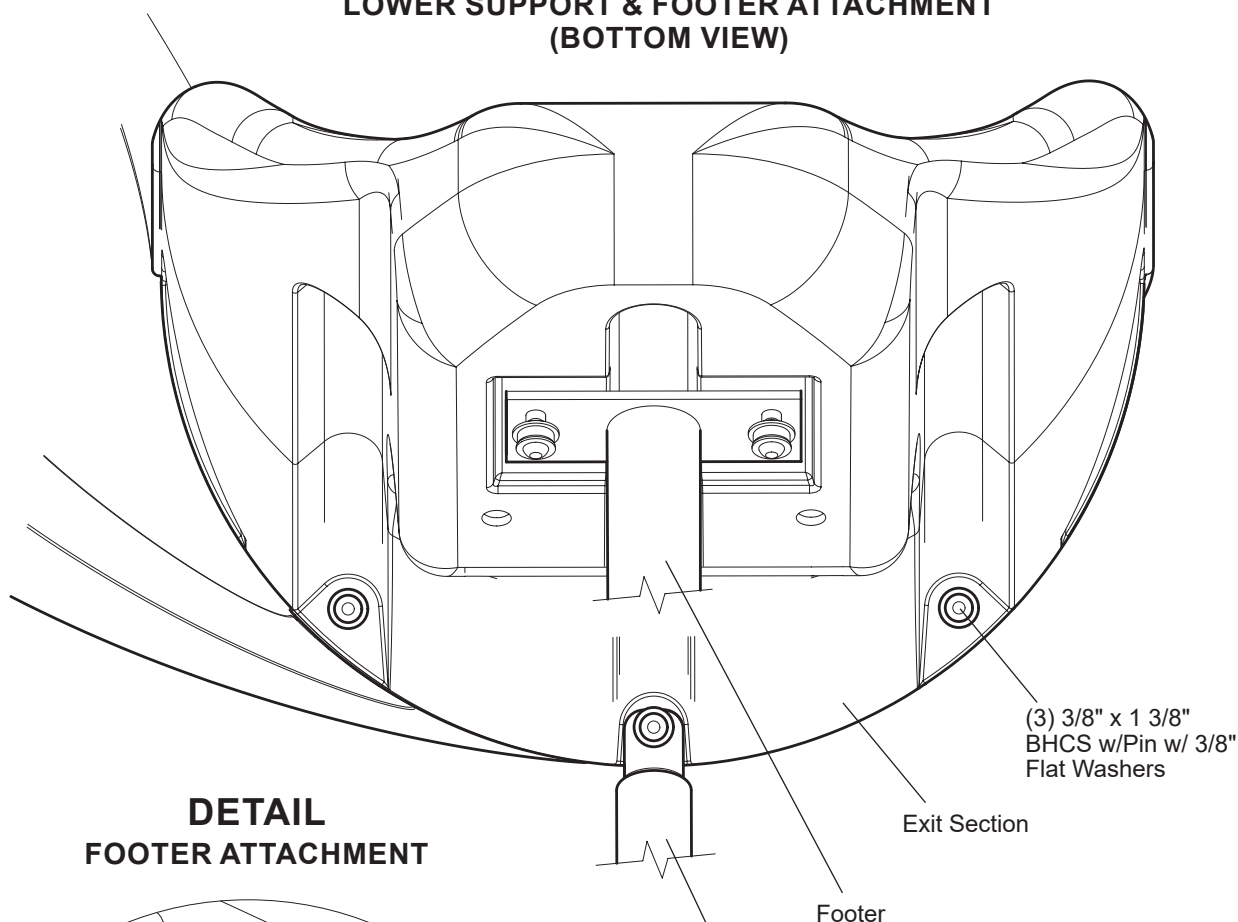
NOTE: Fasten top of slide section with pockets to bottom of slide section without pockets.

**DETAIL
MID-SUPPORT & WHOOSH WINDER SUPPORTS
BOTTOM VIEW**

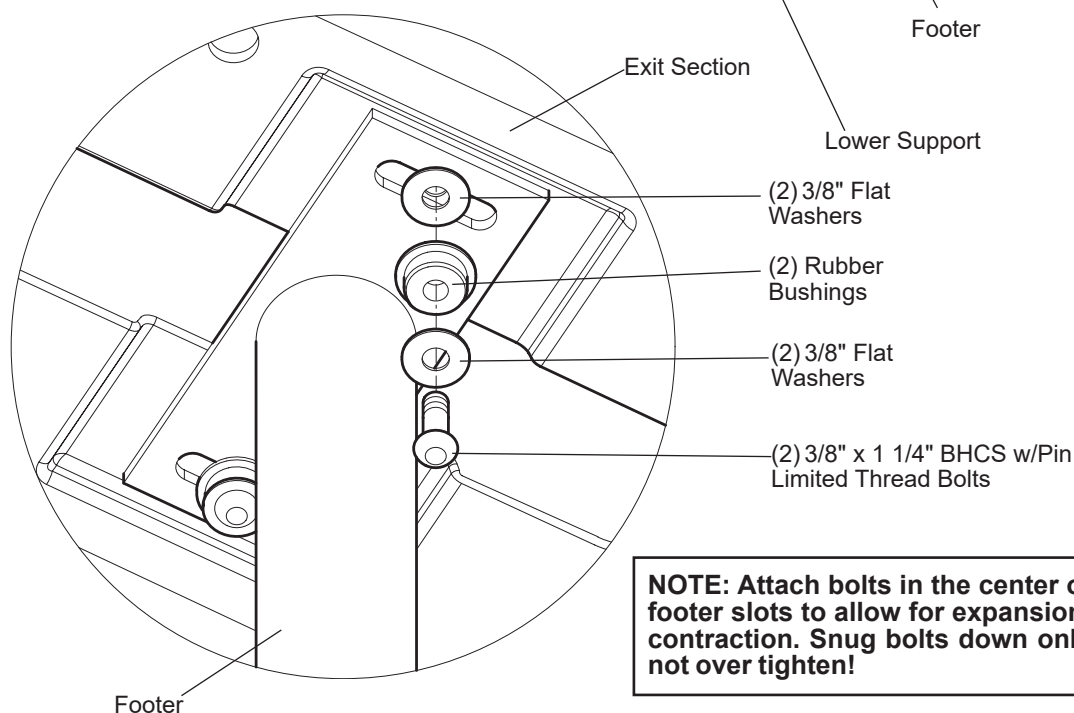


**NOTE:
DO NOT sandwich support between sections. Mount on outside.**

**DETAIL
LOWER SUPPORT & FOOTER ATTACHMENT
(BOTTOM VIEW)**



**DETAIL
FOOTER ATTACHMENT**



NOTE: Attach bolts in the center of the footer slots to allow for expansion and contraction. Snug bolts down only, do not over tighten!



PlayBooster® 222709 10' Tower WhooshWinder™ Slide, DB

Parts List

Part#	Description	Qty.
100583	40 7/16" Rail, Specify Color	1
100610	1/4" x 5/8" Drive Rivet, AL/SST	2
105327	5" Half Clamp, Specify Color	2
113729	Offset Hanger Clamp, Specify Color	2
124867	Elbow Section (RH), Specify Color	3
124876	Entrance Section, Specify Color	1
124877	Exit Section, Specify Color	1
128261	Exit Footer (DB), Specify Color	1
132443	Spacer Tube, Specify Color	2
221442	WhooshWinder Section, Specify Color	1
221939	Mid-Support (DB), Specify Color	1
221940	Upper Support (DB), Specify Color	1
221941	10' Support (DB), Specify Color	1
222246	WhooshWinder Support, Specify Color	2
225584	Lower Support (DB), Specify Color	1
224782	WhooshWinder 10' Tower Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100292	3/8" x 1 1/4" BHCS w/Pin Limited Thread, SST	2
100351	3/8" Tee Nut, SST	4
100362	3/8" Flat Washer, SST	36
111442	#871 Rubber Bushing	2
113027	3/8" x 1 3/8" BHCS w/Pin, SST	18
123224	3/8" x 1 11/16" BHCS w/Pin, SST	10
100611	1/4" x 3/8" BHCS w/Pin, SST	4

DB = Direct Bury

Specifications

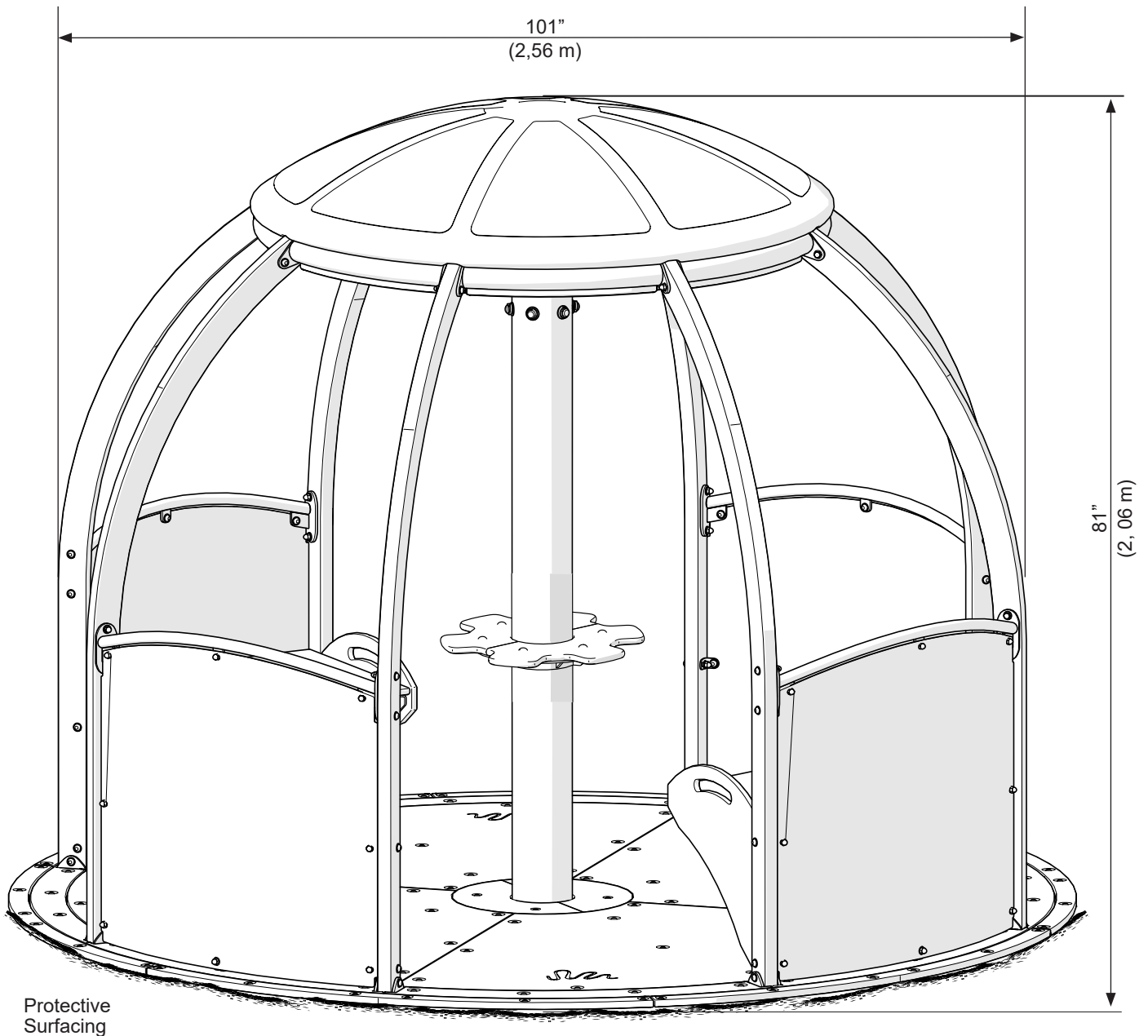
Slide Sections:	Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
Rail:	1 1/8" (28,57 mm) O.D. 6005-T5 aluminum extrusion with 5/16" (7,92 mm) walls. Finish: ProShield®, color specified.
Mid-Support :	Weldment comprised of 1.900" (48,26 mm) O.D. RS20 (.090"-.100") (2,28 mm - 2,54 mm) galvanized steel tubing and 3/16" (4,74 mm) x 1 1/4" (31,75 mm) zinc plated steel strap. Finish: ProShield, color specified.
Lower Support:	Weldment comprised of 1.900" (48,26 mm) O.D. RS20 (.090"-.100") (2,28 mm - 2,54 mm) galvanized steel tubing and 1/4" (6,35 mm) flat steel. Finish: ProShield, color specified.
10' Support:	Weldment comprised of 1.900" (48,26 mm) O.D. RS20 (.090"-.100") (2,28 mm - 2,54 mm) galvanized steel tubing. Finish: ProShield, color specified.
Spacer Tube:	Fabricated from 1.312" (33,33 mm) O.D. x 16 Ga. (.065") (1,65 mm) steel tubing. Finish: ProShield, color specified.
Exit Footer:	Weldment comprised of 2.375" (60,32 mm) O.D. RS20 (.095"-.105") (2,41 mm-2,66 mm) galvanized steel tubing and 1/4" (6,35 mm) x 3" (76,2 mm) x 7 1/2" (190,5 mm) mounting plate. Finish: ProShield, color specified.
Offset Hanger Clamp Assy.:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	Approx. 7 labor hours
Concrete Req.:	DB Approx. 6.55 cu. ft.
Weight:	344 lbs.
Fall Height:	Deck Height
Area Req:	8' (2,43 m) minimum use zone at exit.

Installation Instructions

- 1) Refer to the Plan View/Footing Location for location of footings.
- 2) **(Direct Bury)** Dig footing holes as shown. Refer to the Direct Bury Detail.
- 3) Place 40 7/16" rail in entrance section, place spacer tubes over each end of the 40 7/16" rail, attach offset hanger clamps using 5/8" x 2 1/4" BHCS w/Pin.
- 4) Fasten WhooshWinder sections and supports together loosely starting in the middle and working your way to the outside of each section, using 3/8" x 1 3/8" BHCS w/Pin with 3/8" flat washers on the 3 inside holes and 3/8" x 1 11/16" BHCS w/pin with 3/8" flat washers on the 2 outside holes. When all bolts are started, pull the tops flush with each other and tighten. Refer to the Typical Slide Section Detail.
- 5) Attach exit footer to exit section. Attach lower support to exit section and WhooshWinder section. **NOTE: Attach bolts in the center of the slots to allow for expansion and contraction. Snug bolts down only, do not over tighten. Refer to the Footer Attachment Detail.**
- 6) With SlideWinder fully assembled, attach entrance section to the face of the deck using 3/8" x 7/8" BHCS w/Pin and 3/8" flat washers.
- 7) Attach offset hanger clamps to posts using 5" half clamps, 3/8" x 1 1/8" BHCS w/Pin and 3/8" w/Pin tee nuts. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 8) Insert 10' support and upper support into WhooshWinder supports. With supports plumb, drill through WhooshWinder supports and into upper support and 10' support using a 1/4" (Letter F) drill bit. Insert rivets. Refer to the Typical Mid-Support Detail.
- 9) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 10) With supports plumb pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.
- 11) Install protective surfacing before users are allowed to play on the structure.

SAFETY NOTE

Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)

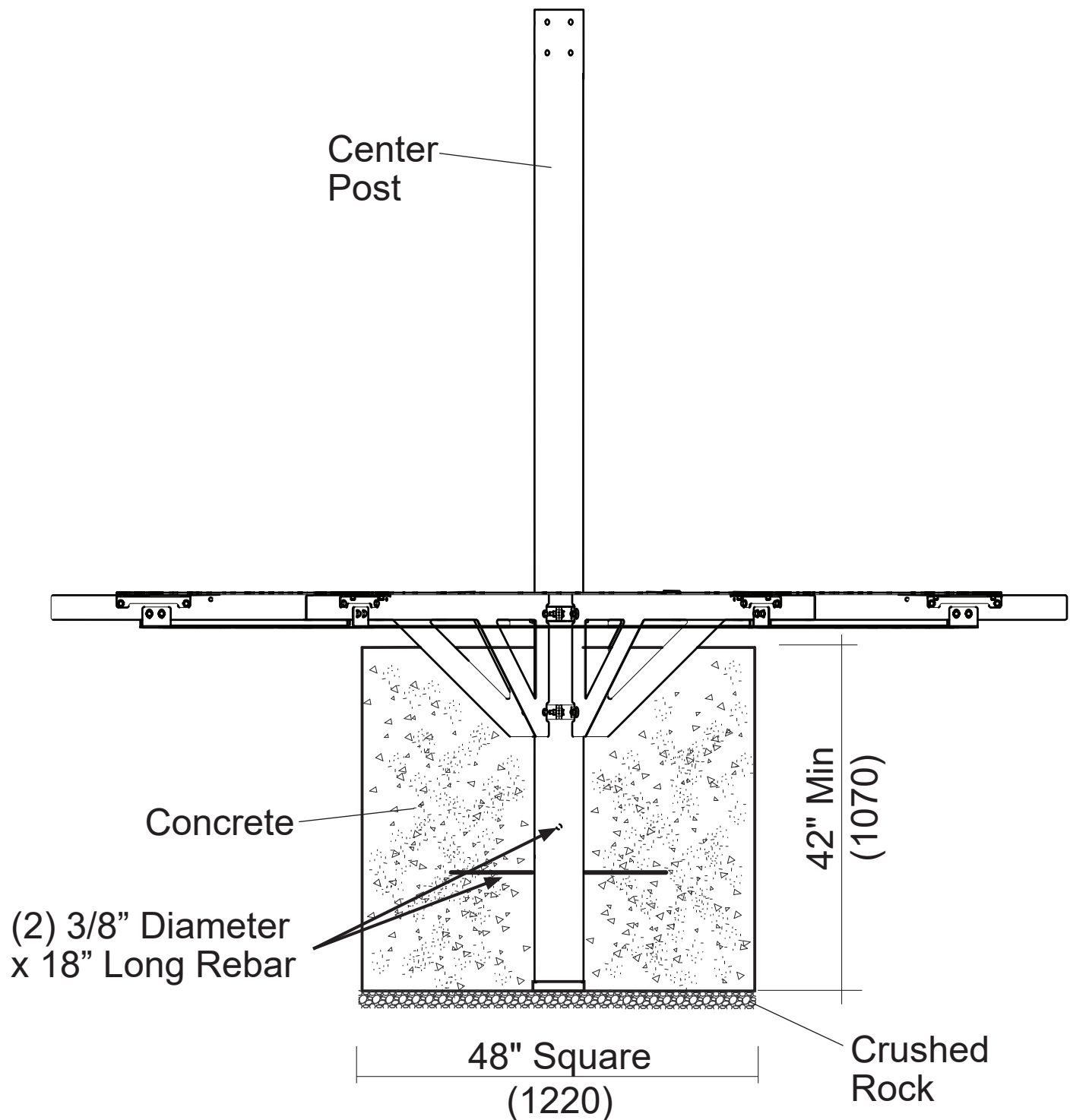


Scan the QR Code
to the right, or
type the URL into
a browser to view
the video

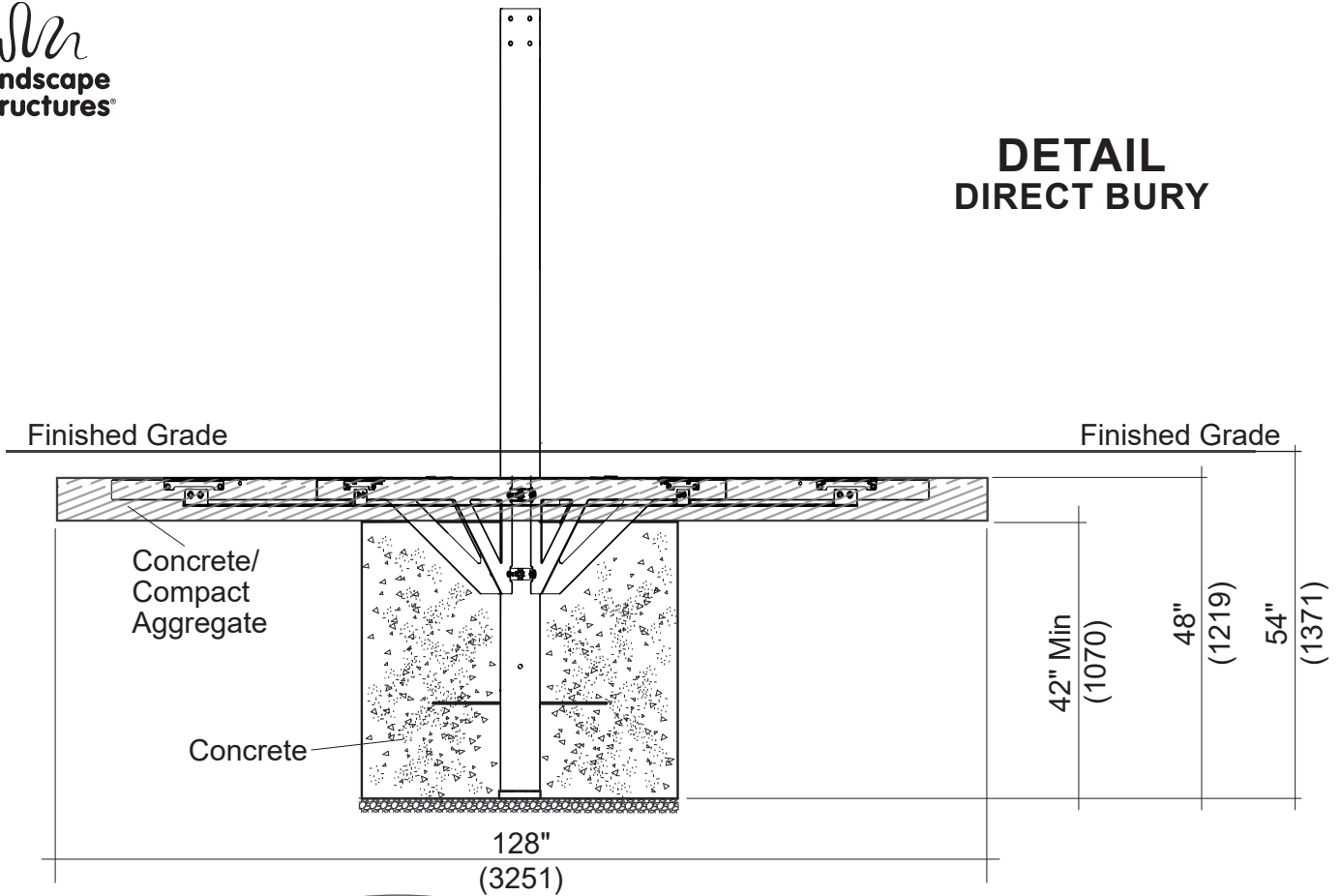


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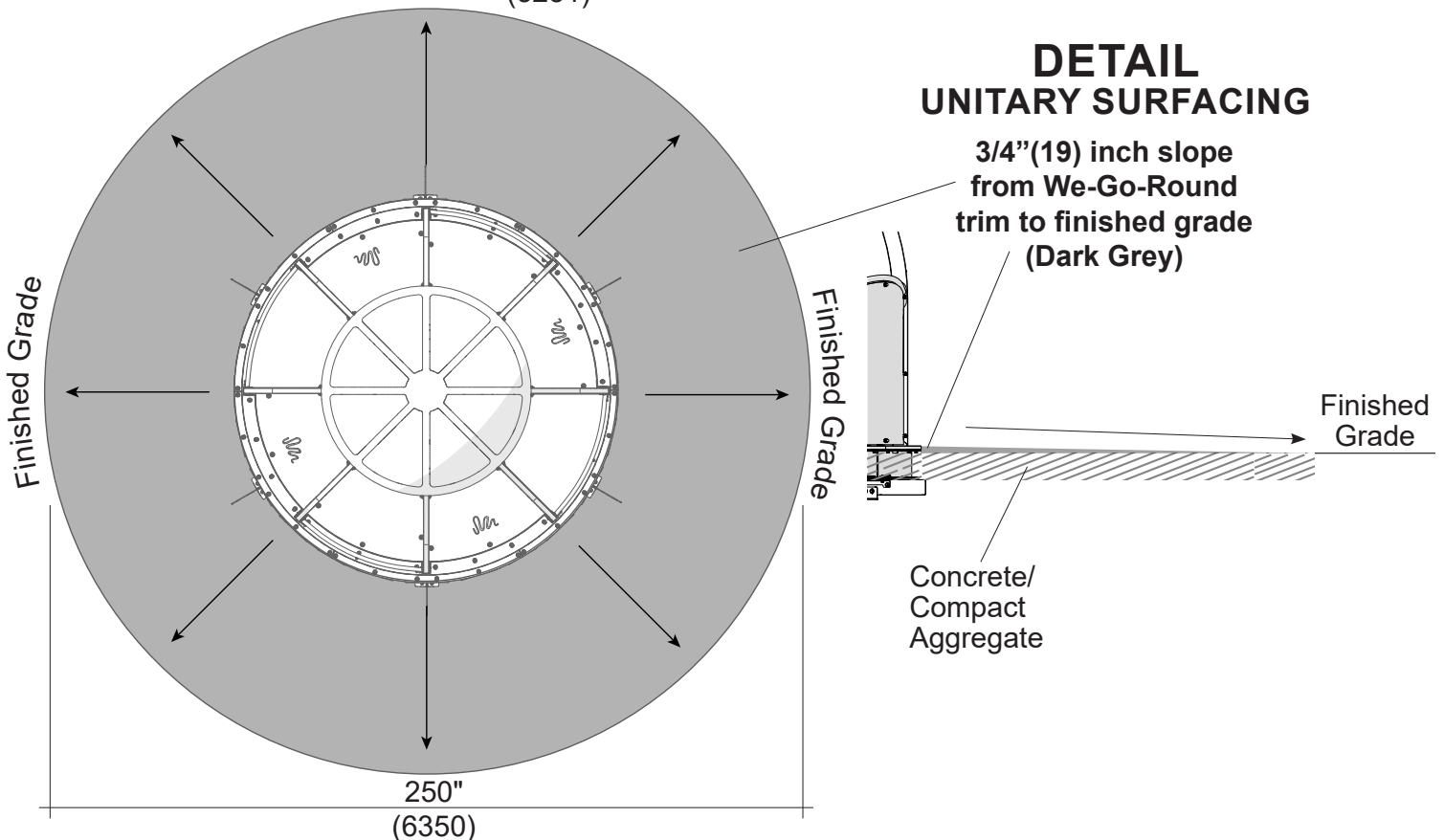
DETAIL DIRECT BURY



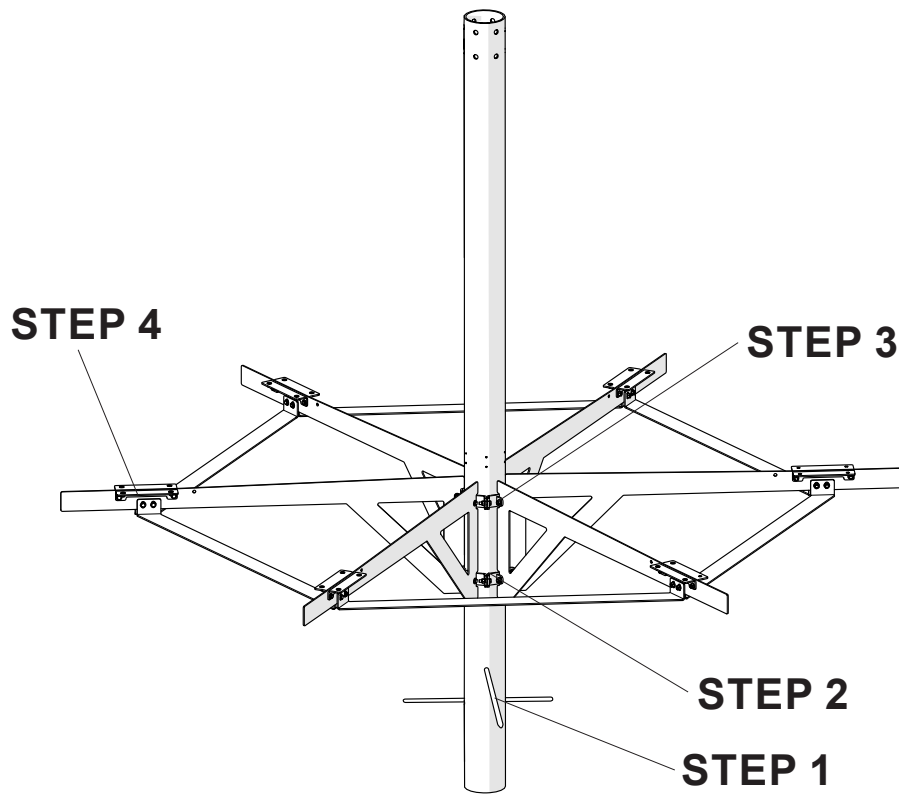
DETAIL DIRECT BURY



DETAIL UNITARY SURFACING

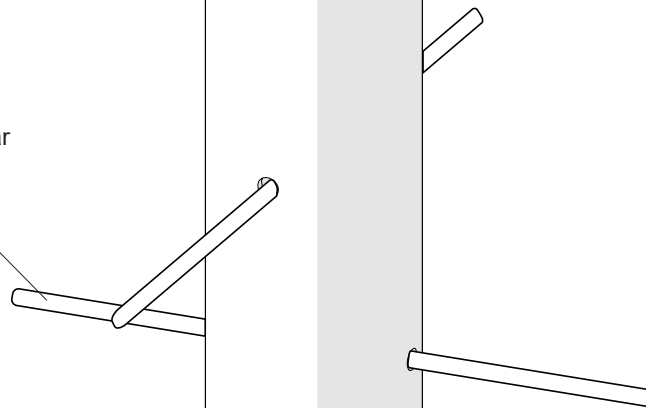


FOUNDATION I



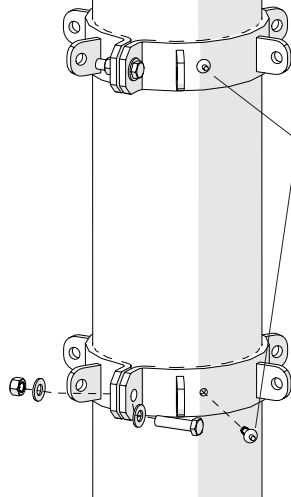
STEP 1

(2) 3/8" Diameter x 18" Long Rebar

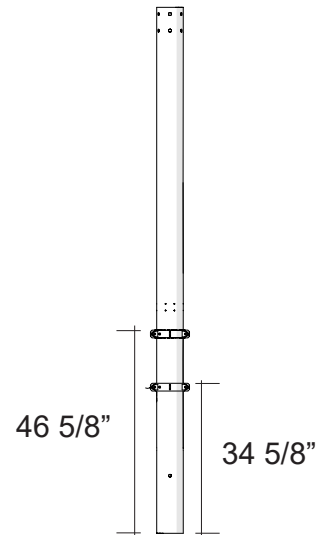




1x  6.0 OD x .25" x 119.50" Post (289361)
 2x  3/8" x 18" Rebar (222399)



STEP 2



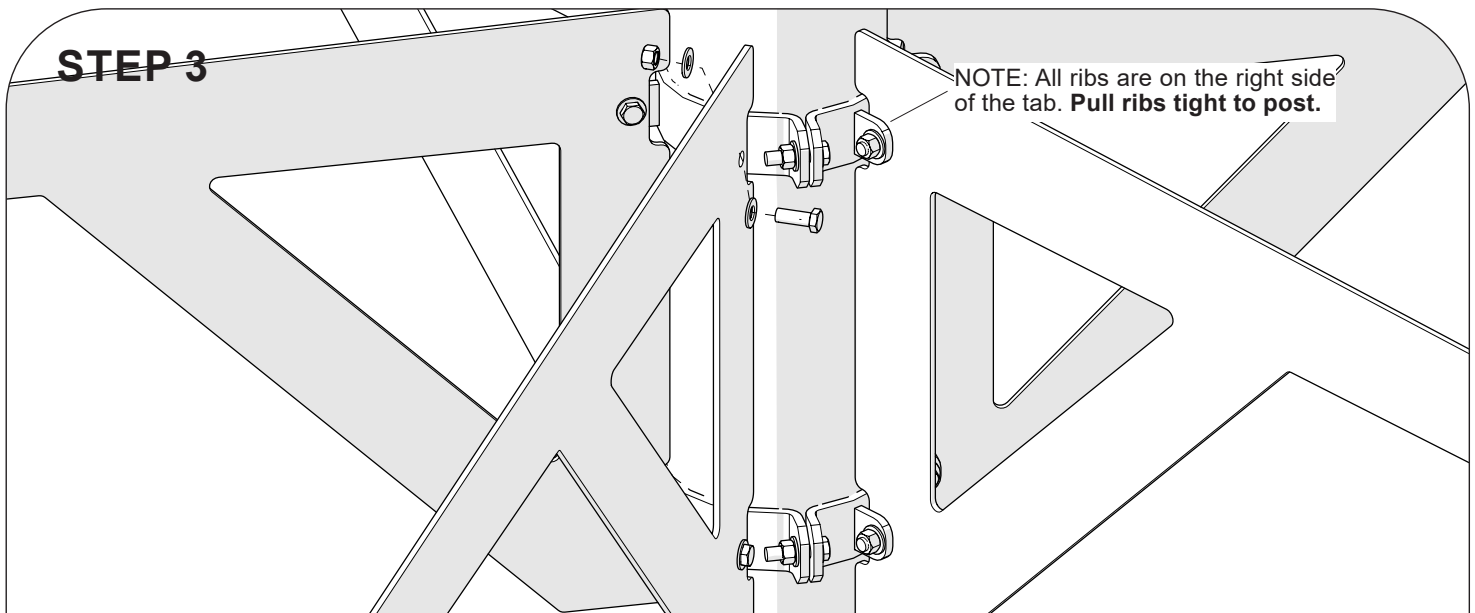
NOTE: Rivets will set clamp height and orientation.



- 4x  Rib Clamp (249292)
 2x  $\frac{1}{4}$ x $\frac{5}{8}$ " Drive Rivet (10610)
 4x  $\frac{3}{8}$ " Standard Hex Nut (100327)



- 4x  $\frac{3}{8}$ " x $1\frac{1}{2}$ " Hex Screw (100208)
 8x  $\frac{3}{8}$ " SAE Washer (100365)

STEP 3

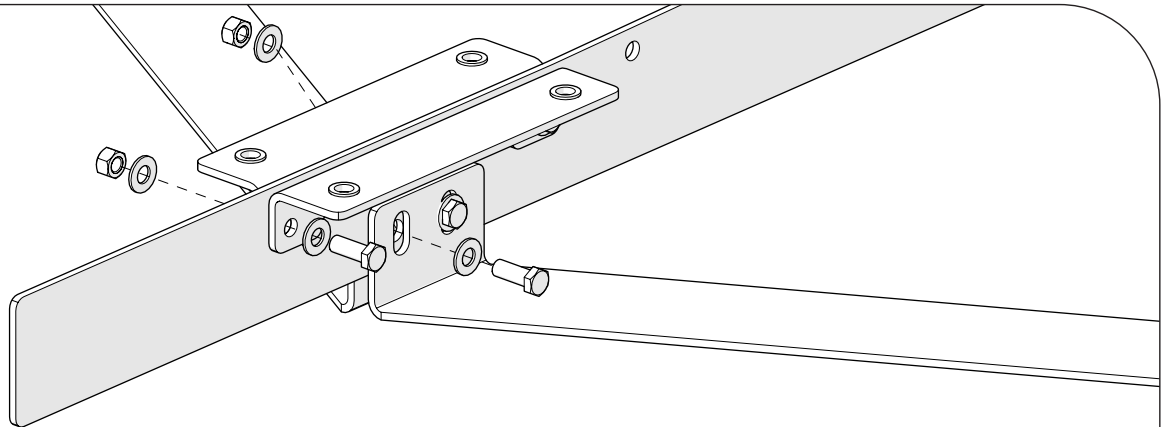







NOTE: All ribs are on the right side of the tab. Pull ribs tight to post.

- 6x  Rib (249295)
 12x  $\frac{3}{8}$ " Standard Hex Nut (100327)

- 12x  $\frac{3}{8}$ " x 1" Hex Screw (100206)
 24x  $\frac{3}{8}$ " SAE Washer (100365)

STEP 4



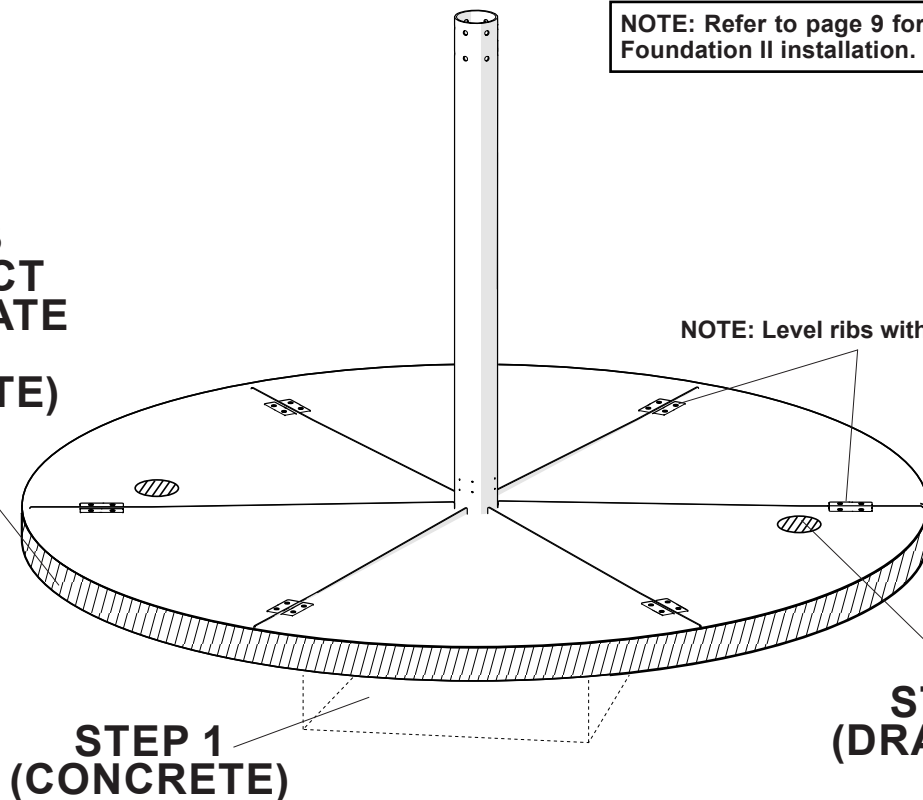
12x		Rib Bracket (249299)	24x		$\frac{3}{8}$ " x 1" Hex Screw (100206)
24x		$\frac{3}{8}$ " Standard Hex Nut (100327)	48x		$\frac{3}{8}$ " SAE Washer (100365)
6x		Rib Footer (249297)			

FOUNDATION II

NOTE: Refer to page 9 for in-field photos of Foundation II installation.

**STEP 3
(COMPACT
AGGREGATE
OR
CONCRETE)**

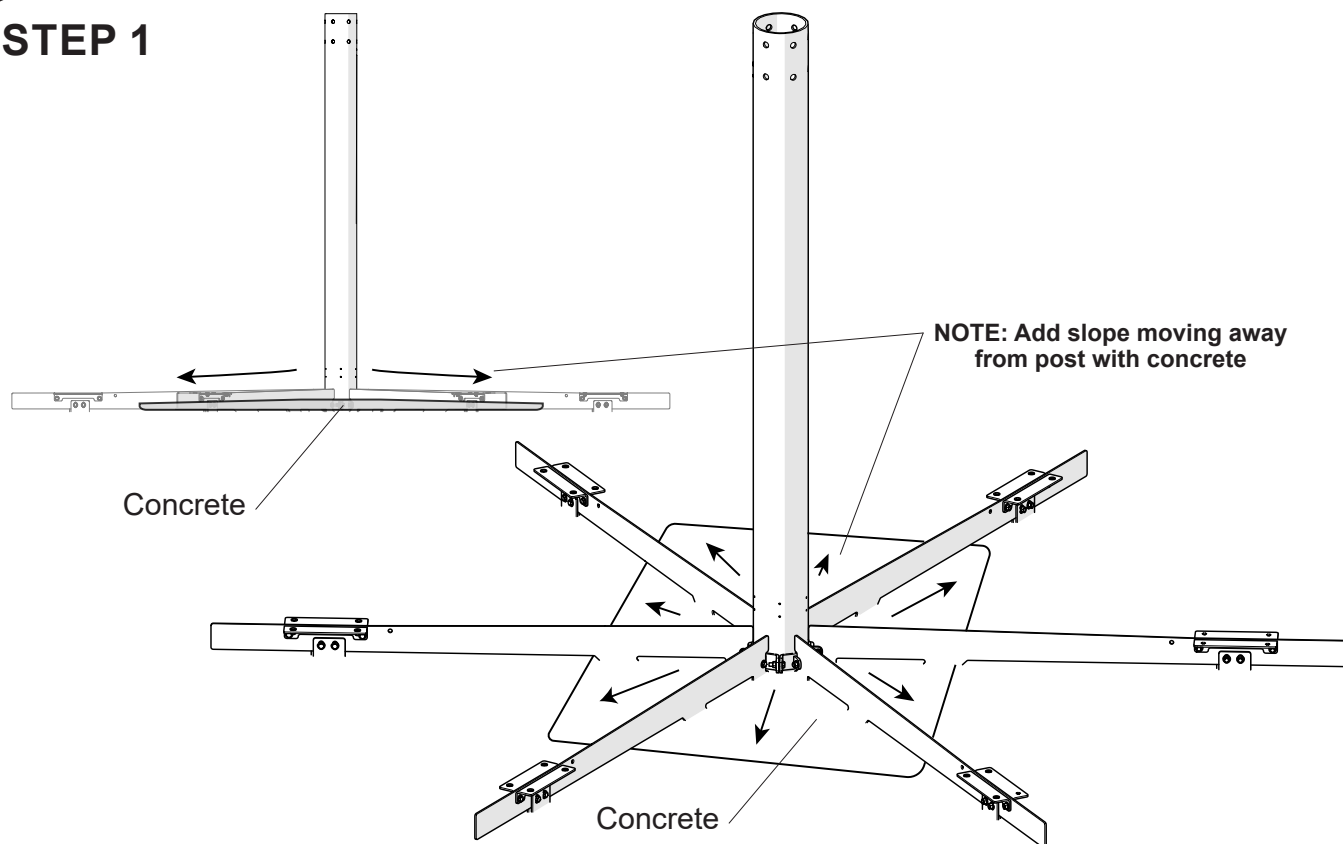
NOTE: Level ribs with aggregate/concrete



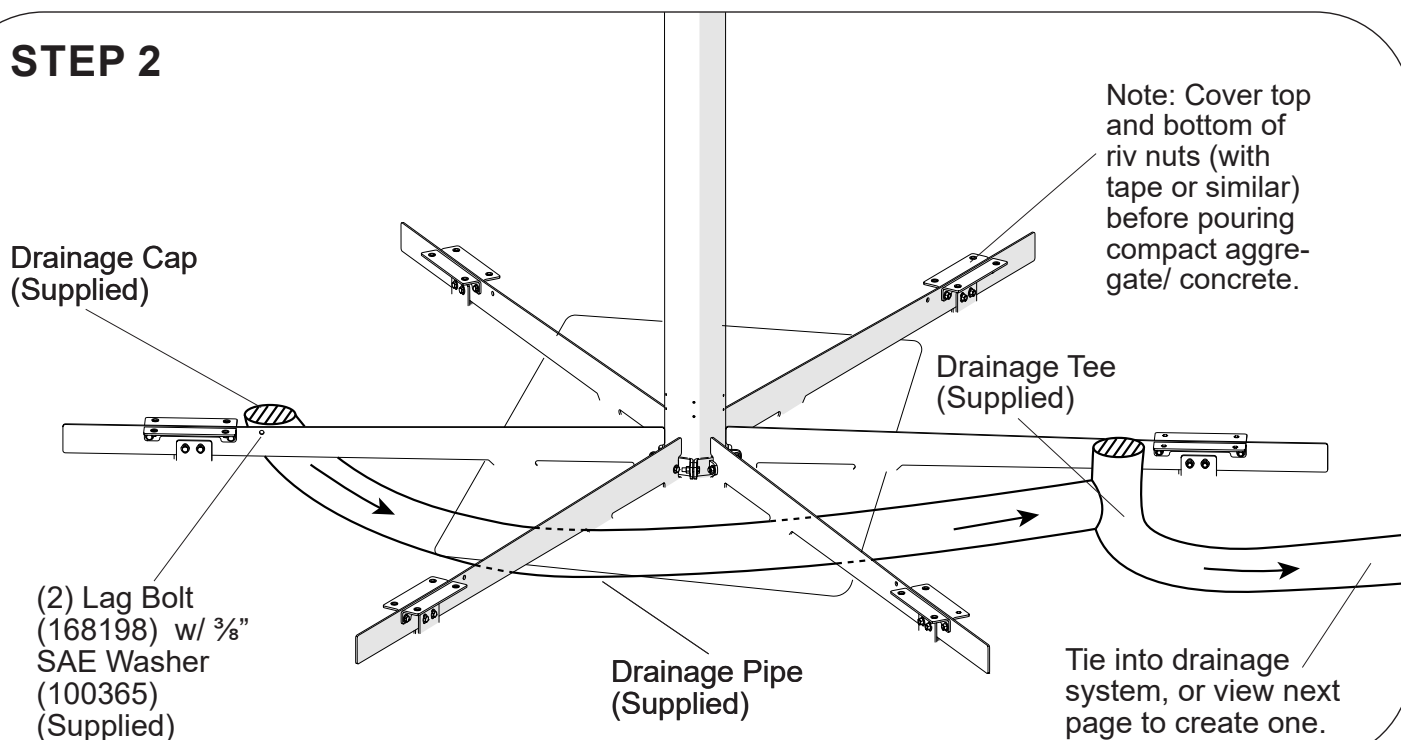
**STEP 1
(CONCRETE)**

**STEP 2
(DRAINAGE)**

STEP 1

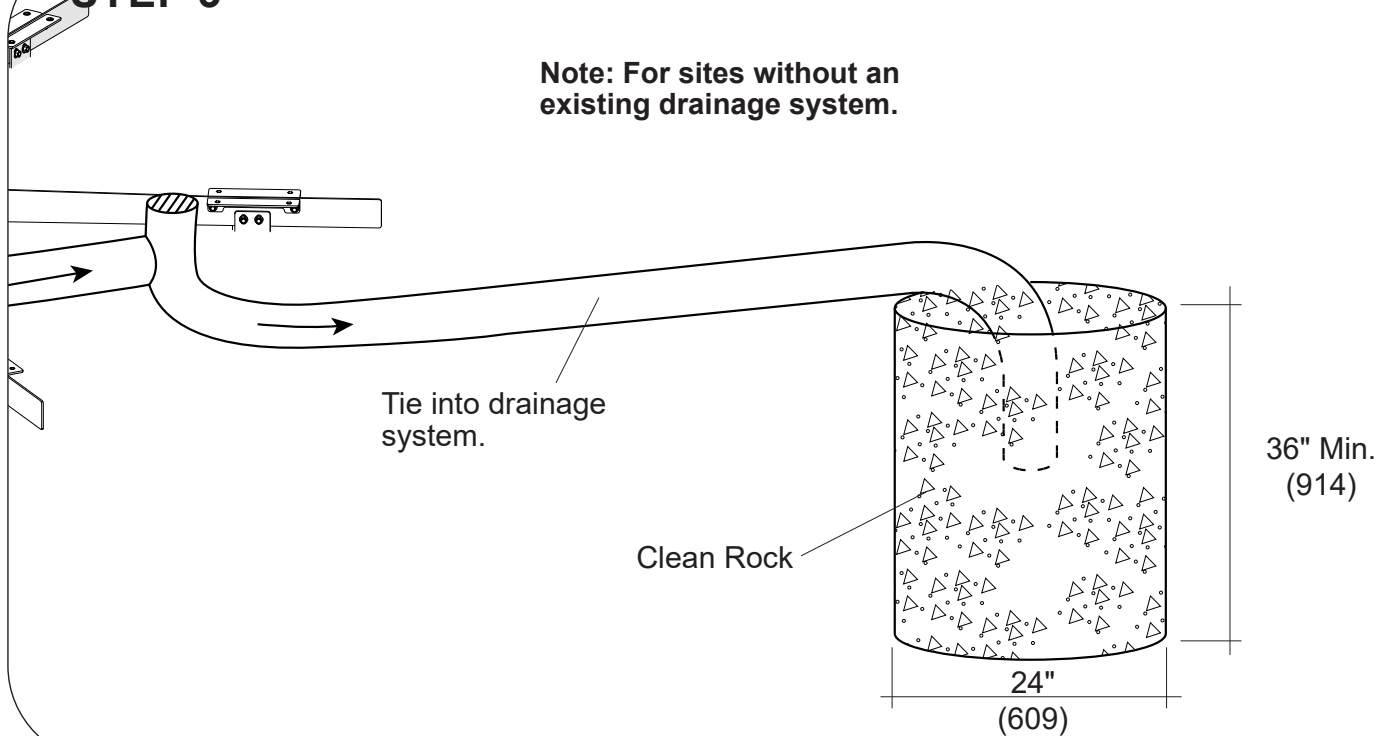


STEP 2



STEP 3

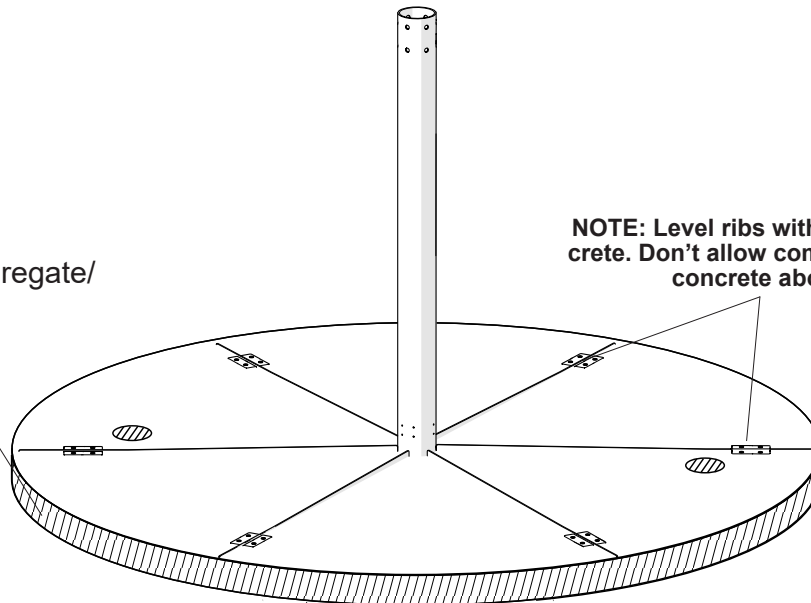
Note: For sites without an existing drainage system.



STEP 4

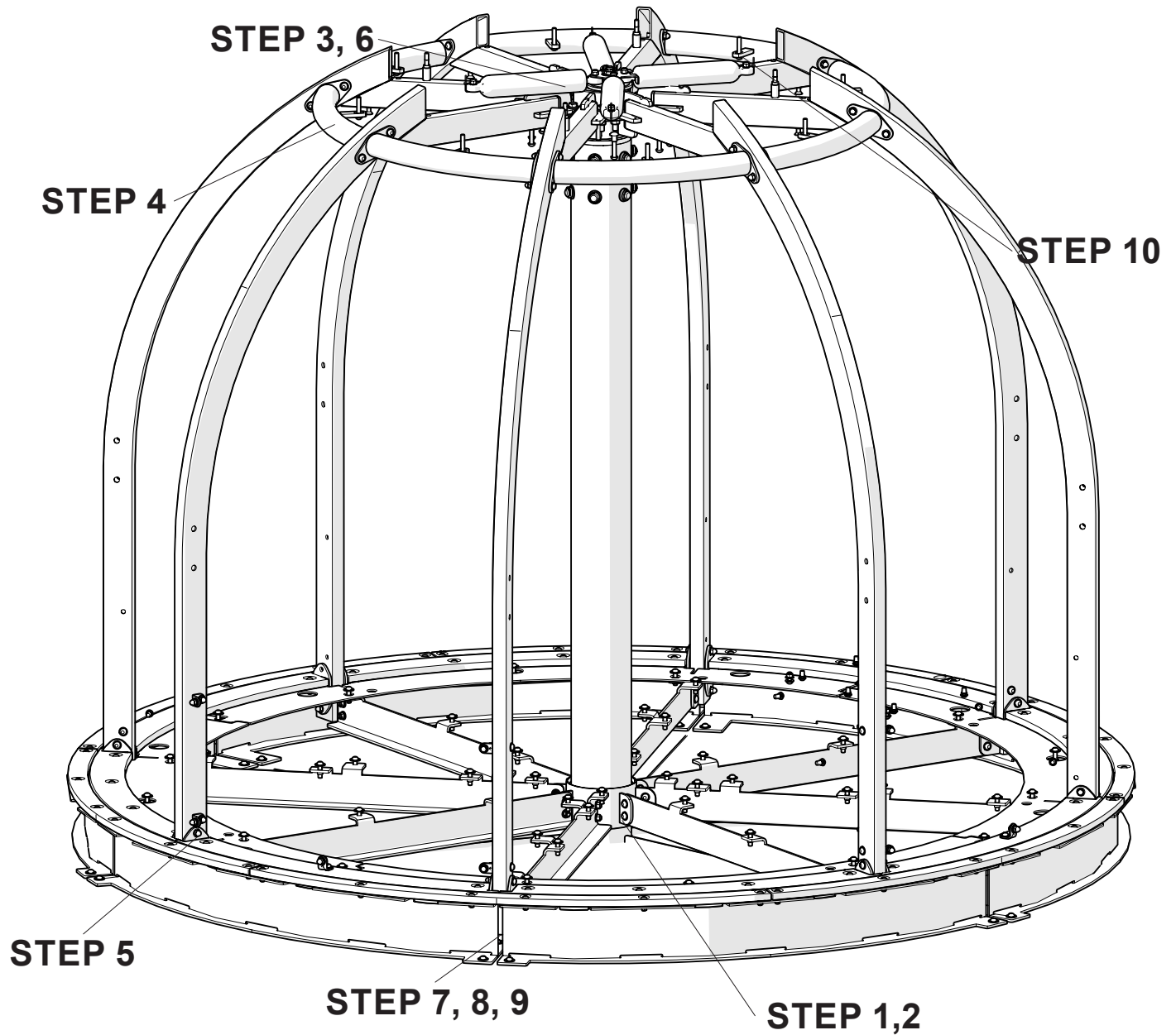
Compact Aggregate/
Concrete

NOTE: Level ribs with aggregate/
concrete. Don't allow compact aggregate/
concrete above ribs.

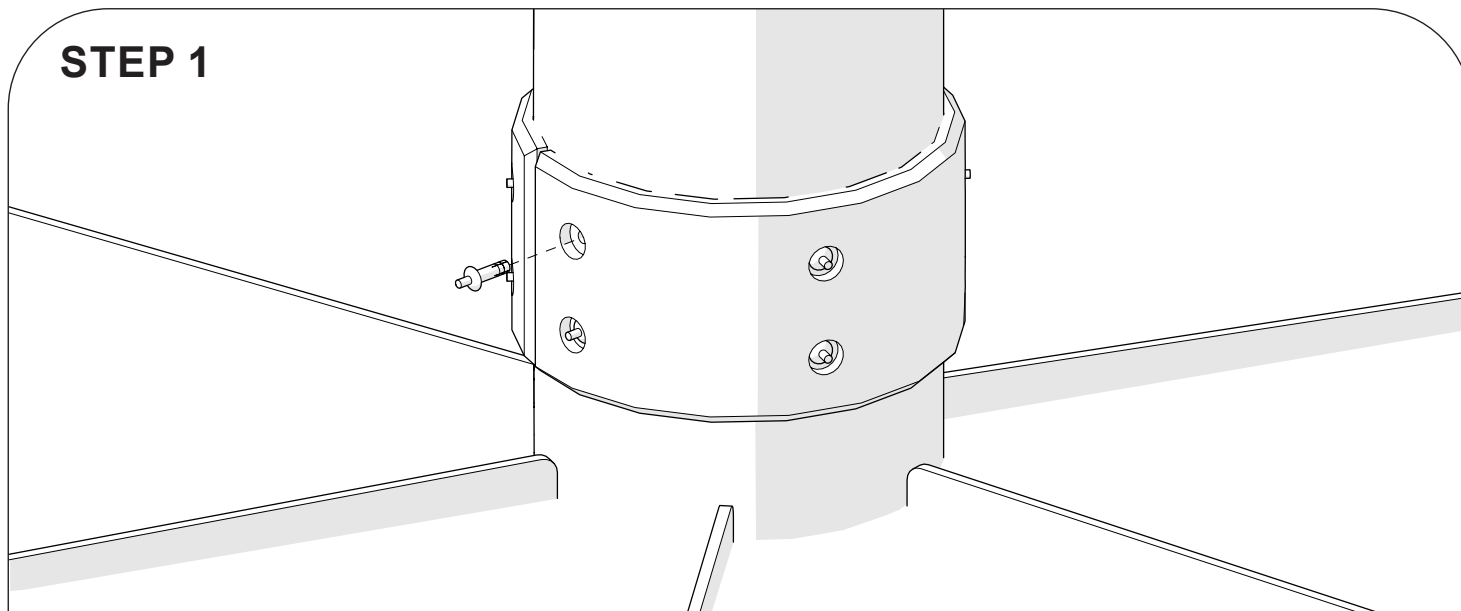





STRUCTURE



STEP 1



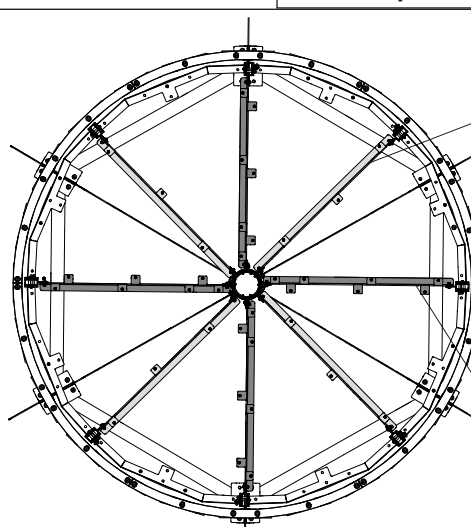
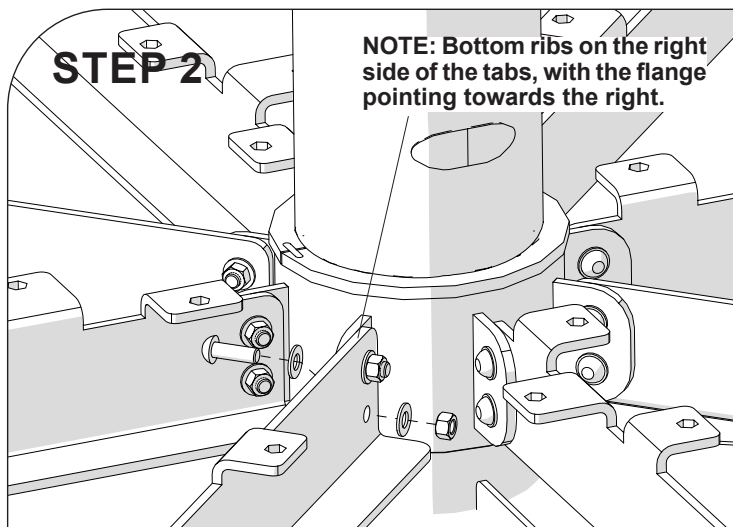
12x  $\frac{1}{4}$ " x $\frac{3}{8}$ " Drive Rivet (100611) 2x  Bushing Tube (292617)



<https://bit.ly/2T8GfGk>

STEP 2









NOTE: Bottom ribs on the right side of the tabs, with the flange pointing towards the right.



(4) 3 Tab Bottom Rib

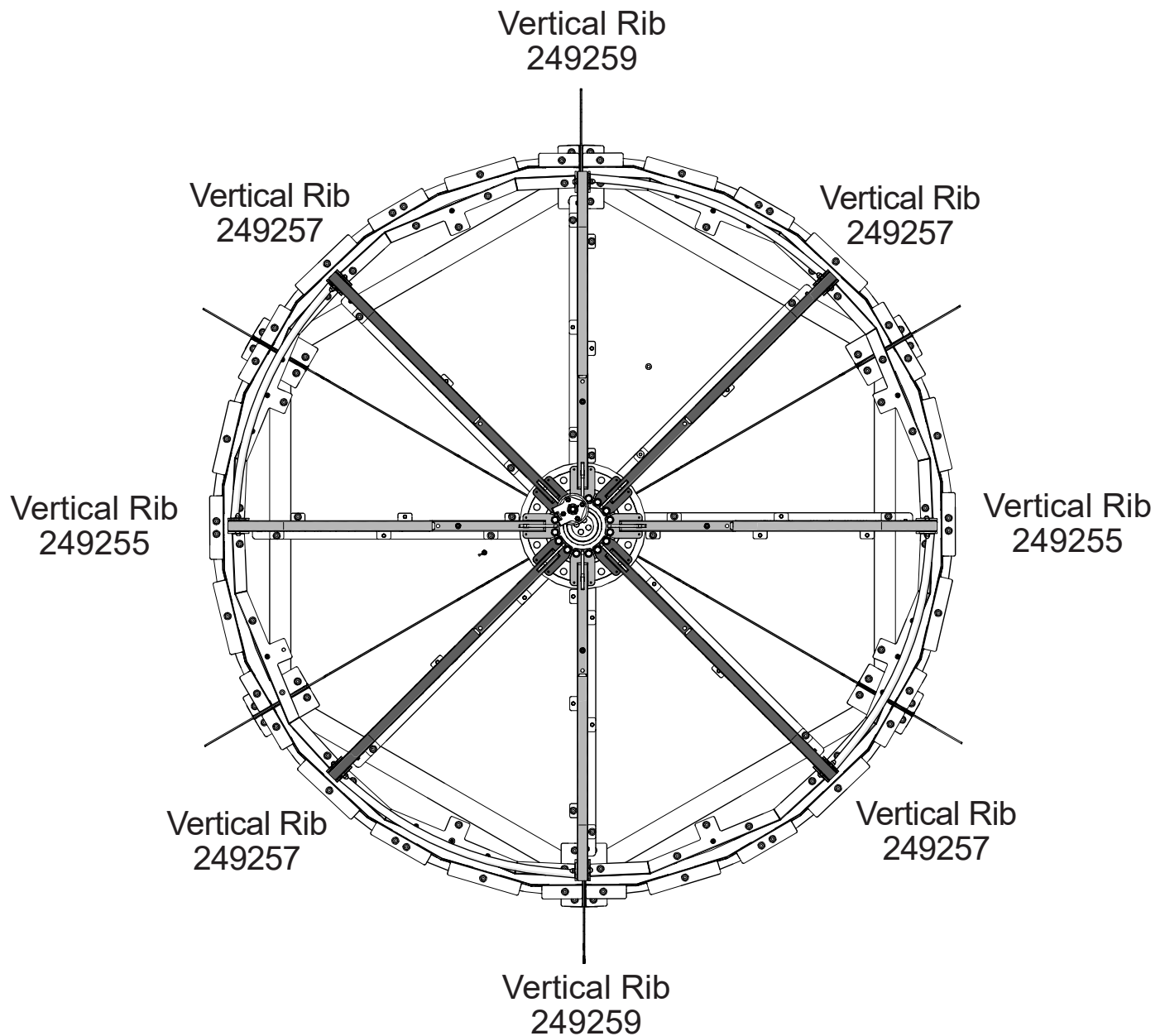
NOTE:
Alternate 3 and 7 tab bottom ribs as shown.

(4) 7 Tab Bottom Rib

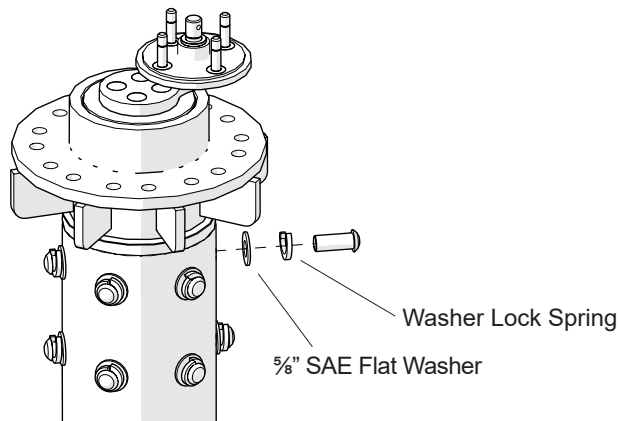
16x  $\frac{3}{8}$ " Standard Hex Nut (100327) 16x  $\frac{3}{8}$ x 1 $\frac{1}{8}$ " BHCS (100198)
4x  3 Tab Bottom Rib (249267) 32x  $\frac{3}{8}$ " SAE Washer (100365)
4x  7 Tab Bottom Rib (249266) 1x  Bottom Rib Mount (248520)
1x  Bushing Belt (254468) 1x  Cable Tie 5 - $\frac{3}{4}$ " (109680)

REFERENCE FOR STEP 4

NOTE: Orientation of the Vertical ribs and 3 Tab/ 7 Tab Bottom ribs are independent of each other.



STEP 3



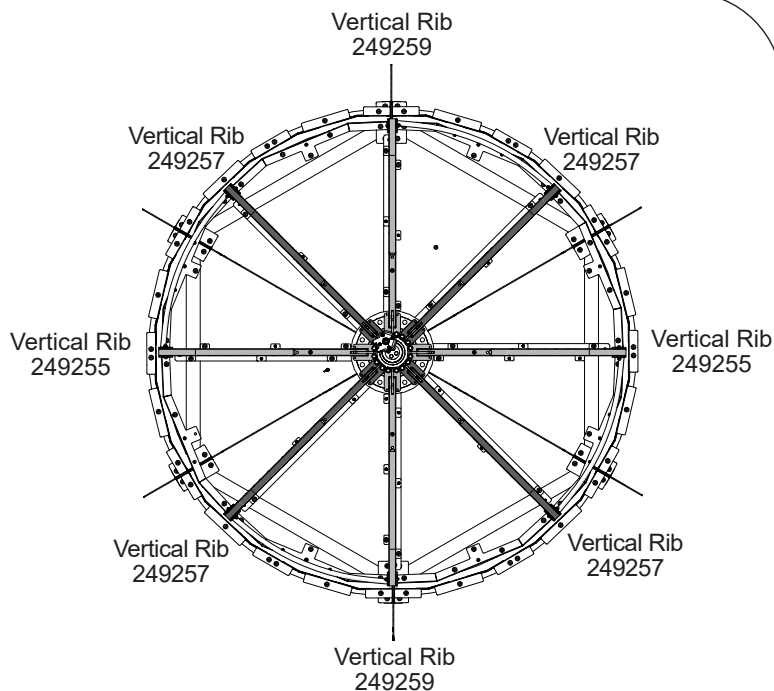
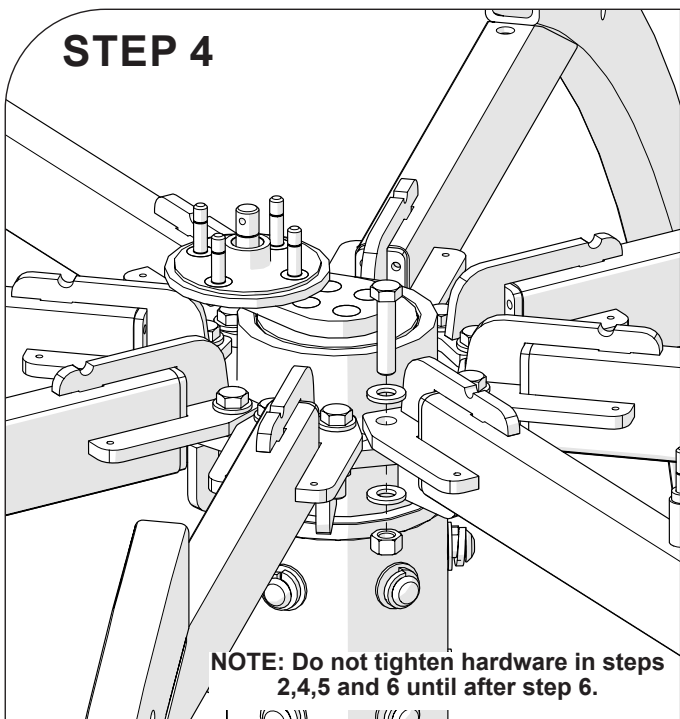
1x 1.25 Offset Bearing and Hub Assembly (254134)

12x 5/8" SAE Flat Washer (129500)

12x 5/8 x 1 1/2" BHCS (100201)

12x Washer Lock Spring (175652)

STEP 4



2x Vertical Rib w/Pin and 1 Insert (249259)

4x Vertical Rib w/o Pin and 1 Insert (249257)

2x Vertical Rib w/Pin and 4 Inserts (249255)

16x 1/2" Standard Hex Nut (129692)

16x 1/2" x 2 1/4" Hex Screw (131862)

32x 1/2" SAE Washer (113550)

STEP 5

NOTE: Refer to step 4 simultaneously to achieve proper placement.

NOTE: Tab is placed on the right of the bottom ribs.
Use level when tightening ribs.

Horizontal Bottom Support

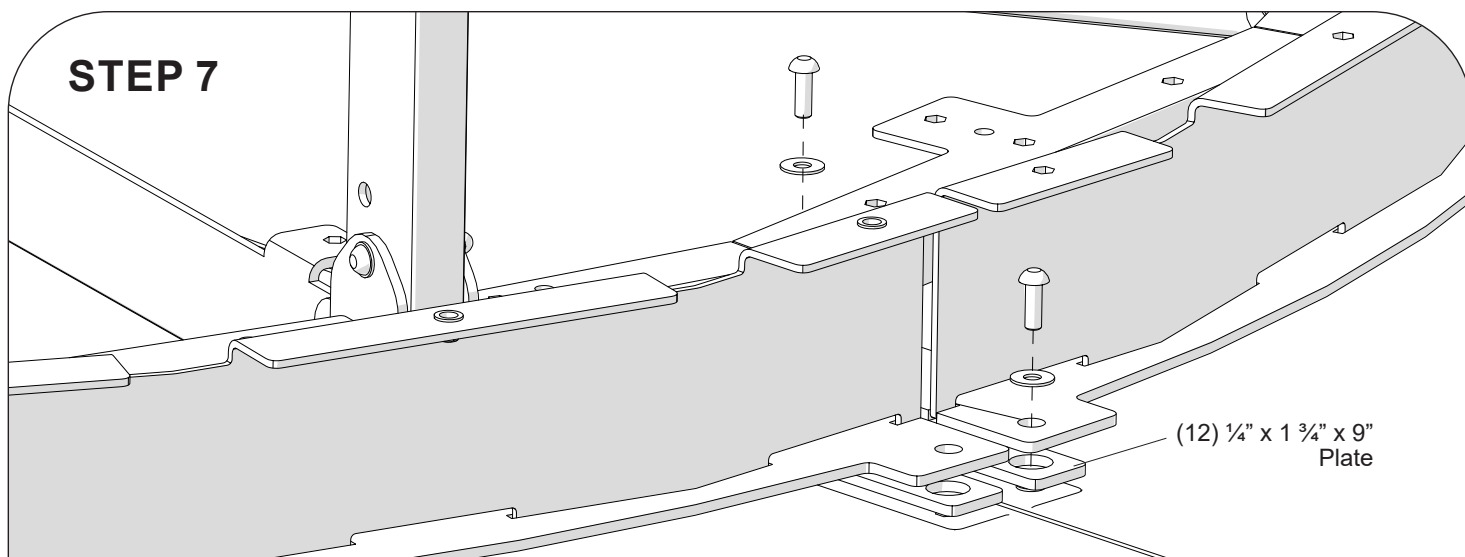
8x		Horizontal Bottom Support (249286)	16x		3/8" Standard Hex Nut (100327)
16x		3/8" Low Crown Hex Nut (100349)	64x		3/8" SAE Washer (100365)
16x		3/8 x 2 1/2" BHCS (100174)	16x		3/8 x 1 1/8" BHCS (100198)

STEP 6

Globe Pipe

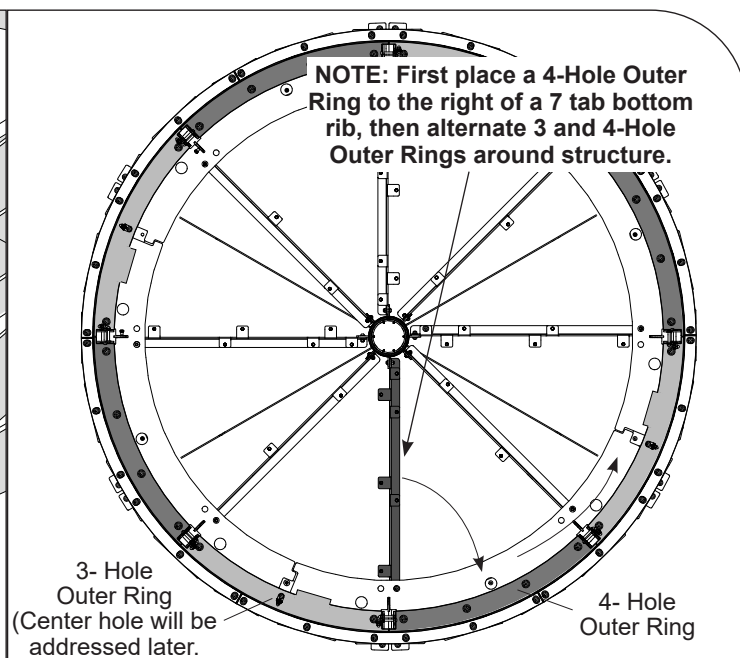
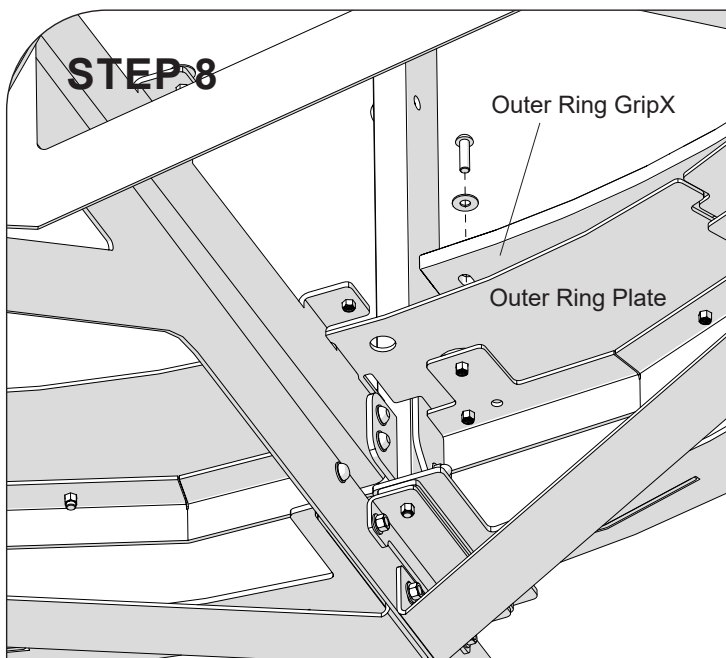
8x		Globe Pipe (212866)	16x		3/8 x 2 1/2" BHCS (100174)
16x		3/8" Low Crown Hex Nut (100349)	32x		3/8" SAE Washer (100365)

STEP 7



- | | | | | | |
|-----|--|--------------------------------------|-----|--|--|
| 6x | | Skirt (249289) | 24x | | $\frac{3}{8}$ " x $1\frac{1}{8}$ " BHCS (100198) |
| 24x | | $\frac{3}{8}$ " Flat Washer (100362) | 12x | | $\frac{1}{4}$ " x $1\frac{3}{4}$ " x 9" Plate (253792) |

STEP 8



- | | | | | | |
|----|--|---|-----|--|--|
| 4x | | Black 3- Hole Outer Ring GripX (297891) | 24x | | $\frac{3}{8}$ " x $1\frac{3}{8}$ " BHCS (113027) |
| 4x | | Black 4-Hole Outer Ring GripX (246441) | 24x | | $\frac{3}{8}$ " Flat Washer (100362) |
| 4x | | Outer Ring Plate (250371) | | | |



<https://bit.ly/2DTsWVh>

STEP 9

NOTE: While placing GripX into place ensure gap doesn't exceed 5/16" while spinning. Alternate Outer Skirt Grip X A (258597) and B (258598).

Grey Outer Skirt
Grip X B (258598)

Grey Outer Skirt
Grip X A (258597)

- | | | | | | |
|-----|--|--------------------------------------|-----|--|---|
| 6x | | Grey Outer Skirt Grip X B (258598) | 36x | | $\frac{3}{8}$ x 1 $\frac{1}{8}$ " BHCS (100198) |
| 6x | | Grey Outer Skirt Grip X A (258597) | | | |
| 36x | | $\frac{3}{8}$ " Flat Washer (100362) | | | |

STEP 10

(8) $\frac{3}{8}$ Nylock Hex Nut

Hub Clamp

- | | | | | | |
|----|--|---|----|--|--------------------|
| 4x | | 70 Series Shock (215884) | 1x | | Hub Clamp (222306) |
| 8x | | $\frac{3}{8}$ " Nylock Hex Nut (136931) | | | |

INTERIOR I

STEP 4

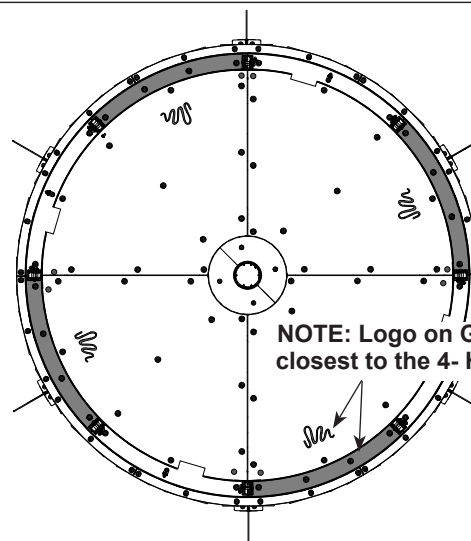
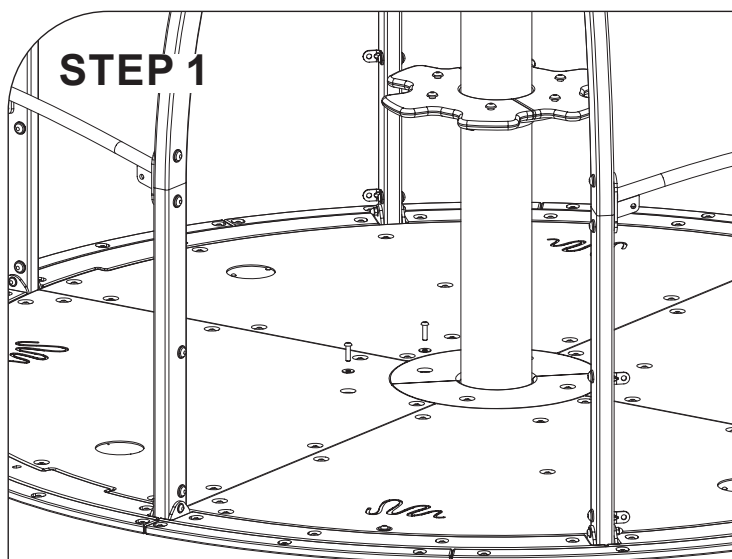
STEP 2

STEP 1

STEP 3

Top of Permalene

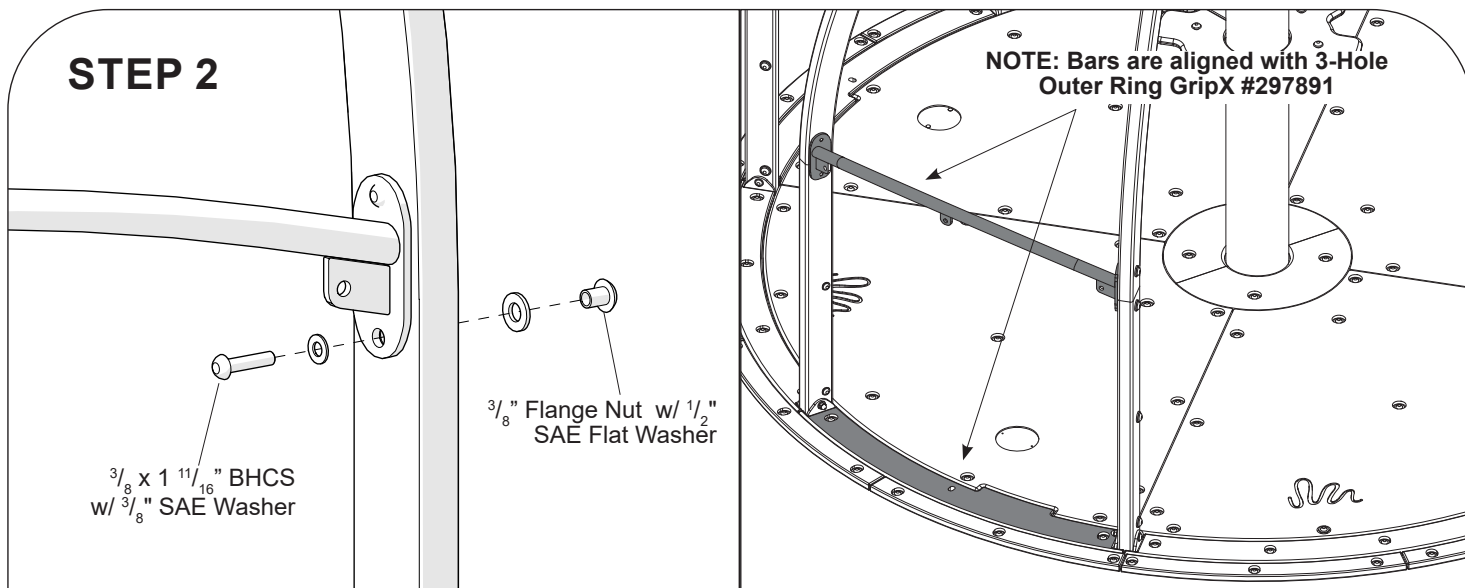
25 1/2"



56x  3/8 x 1 3/8" BHCS (113027)
56x  3/8" Flat Washer (100362)

4x  Black Outer Deck GripX (297889)
2x  Black Center Deck GripX (246435)

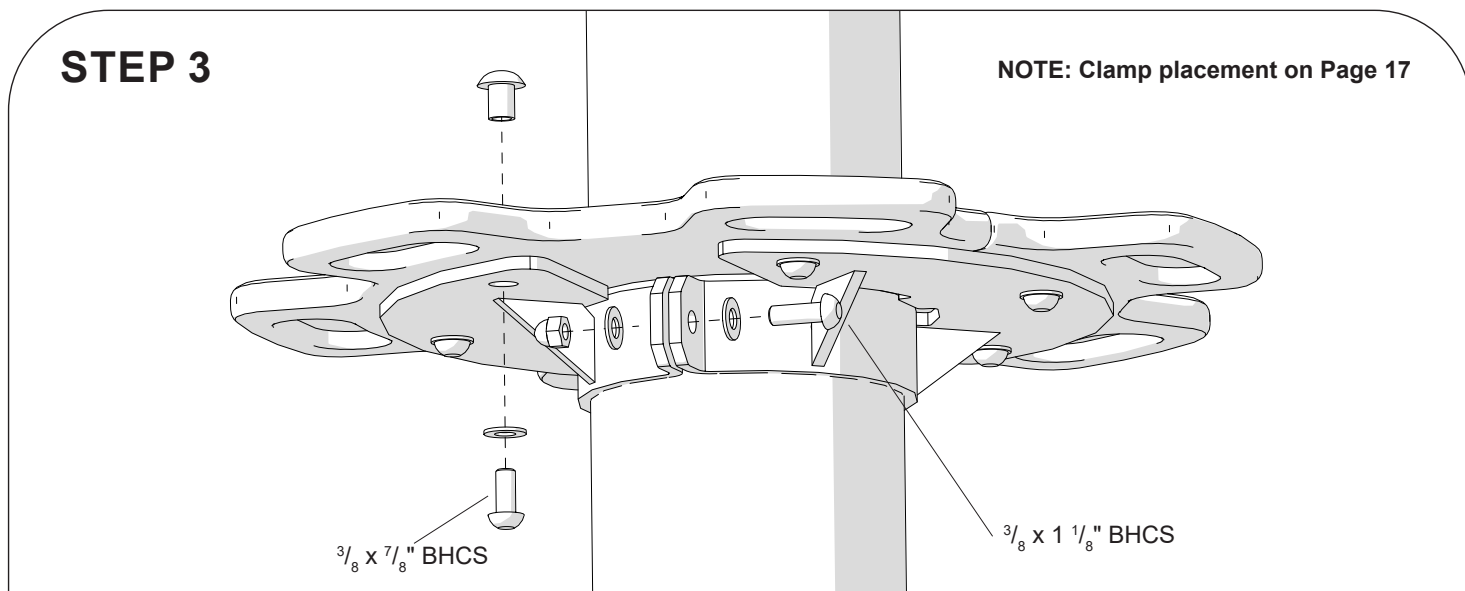
STEP 2



- 4x Arch Support (249265)
- 16x $\frac{3}{8}$ x $1 \frac{11}{16}$ " BHCS (123224)
- 16x $\frac{1}{2}$ " SAE Flat Washer (113550)

- 16x $\frac{3}{8}$ " SAE Washer (100365)
- 16x $\frac{3}{8}$ " Flange Nut (100353)

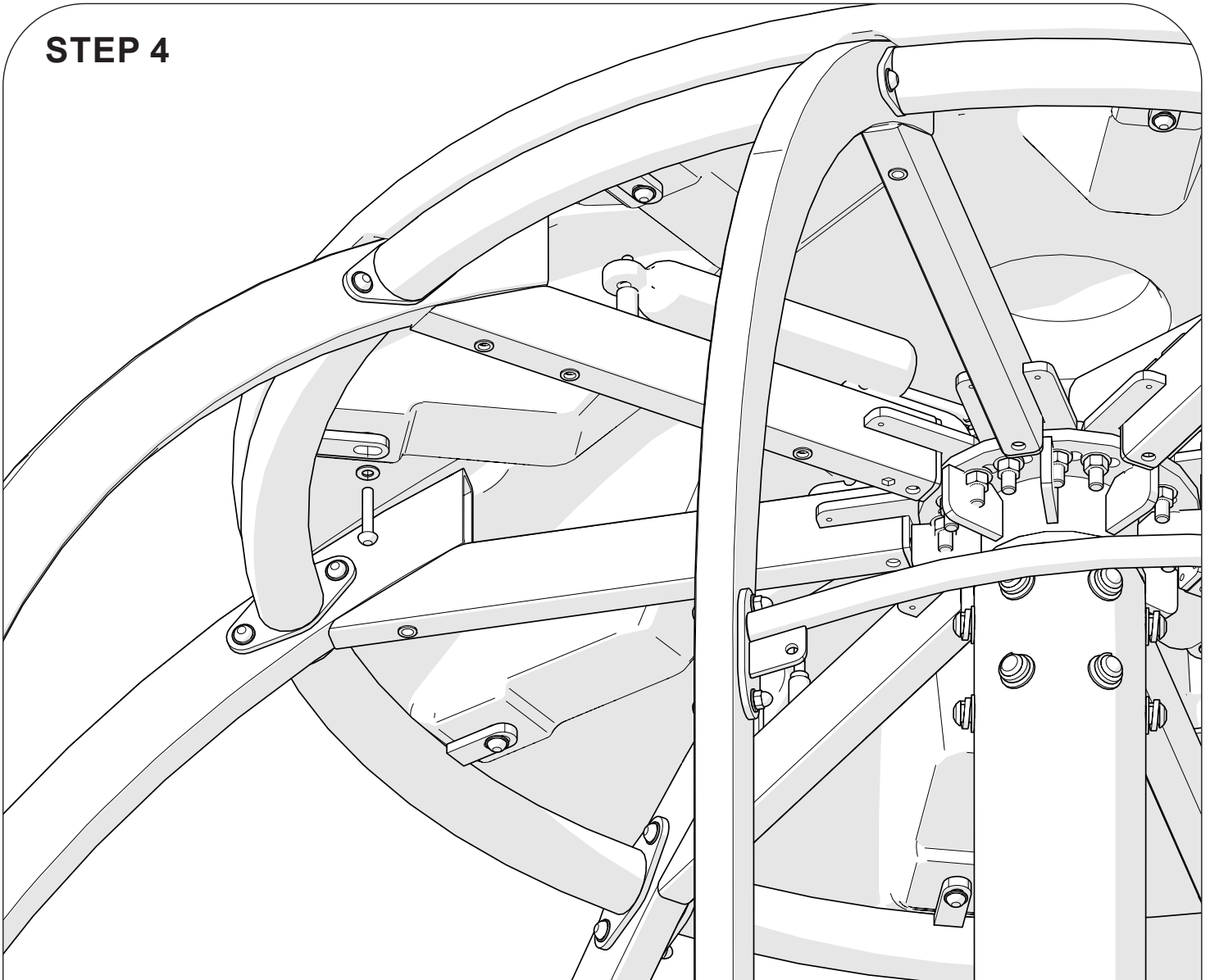
STEP 3




- 2x Center Post Ring Weldment (249268)
- 2x Center Ring Permalene (246424)
- 2x $\frac{3}{8}$ x $1 \frac{1}{8}$ " BHCS (100198)
- 6x $\frac{3}{8}$ x $\frac{7}{8}$ " BHCS (100196)

- 10x $\frac{3}{8}$ " SAE Washer (100365)
- 2x $\frac{3}{8}$ " Low Crown Hex Nut (100349)
- 6x $\frac{3}{8}$ " Flange Nut (100353)

STEP 4



8x 

$\frac{3}{8}$ x 2" BHCS
(100173)

8x 

$\frac{3}{8}$ " SAE Washer
(100365)

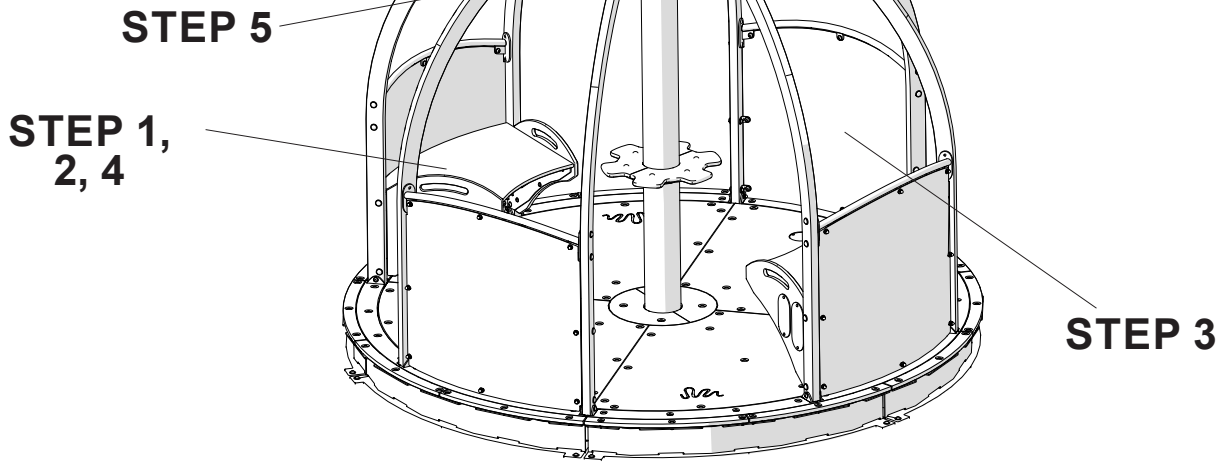
1x 

Spinner Top
(215474)

INTERIOR II

NOTE: Refer to panel orientation below to place panels in proper order.

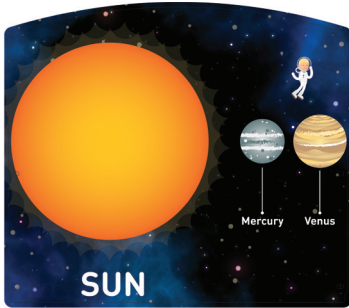
NOTE: Document shows quantities for 2 seat configuration. When assembling a 3 seat configuration refer to quantities in the bill of materials.



250426



250430

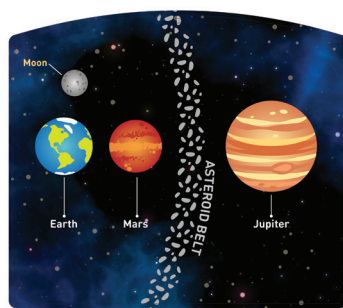


250435

250427



250431

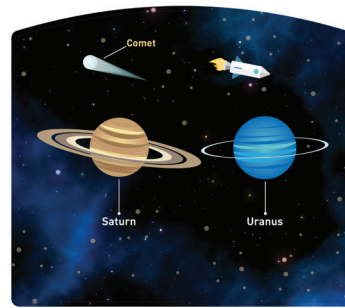


250434

250428



250432

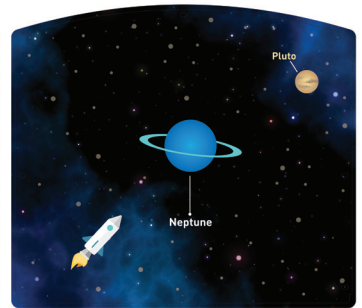


250436

250429



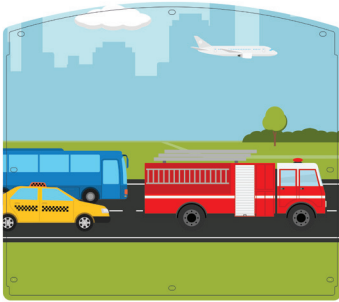
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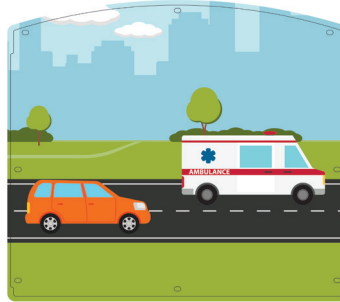
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250438



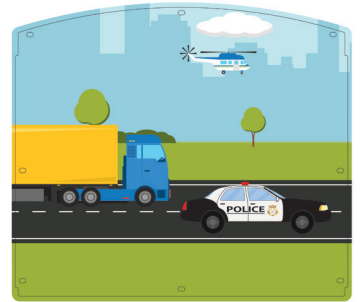
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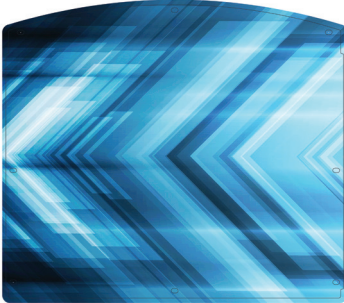
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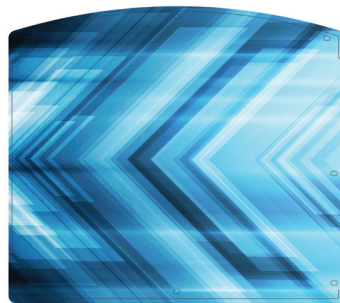
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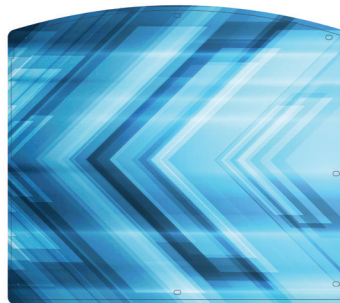
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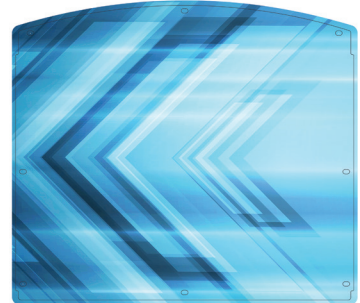
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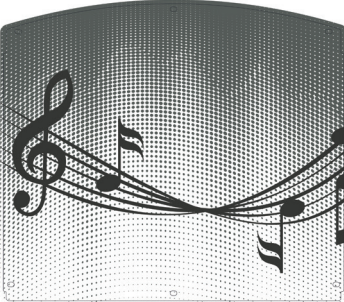
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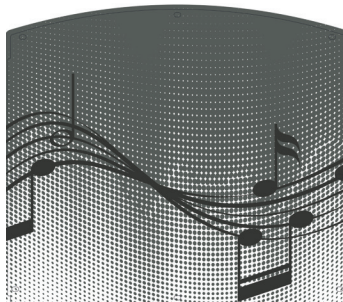
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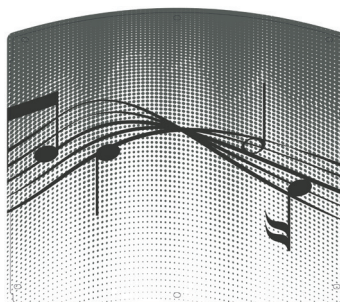
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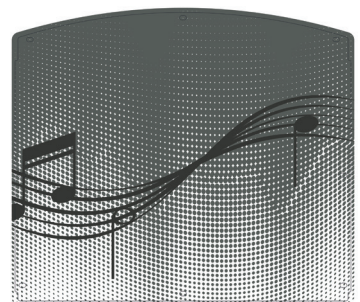
250443



250444



250445



251276



251277

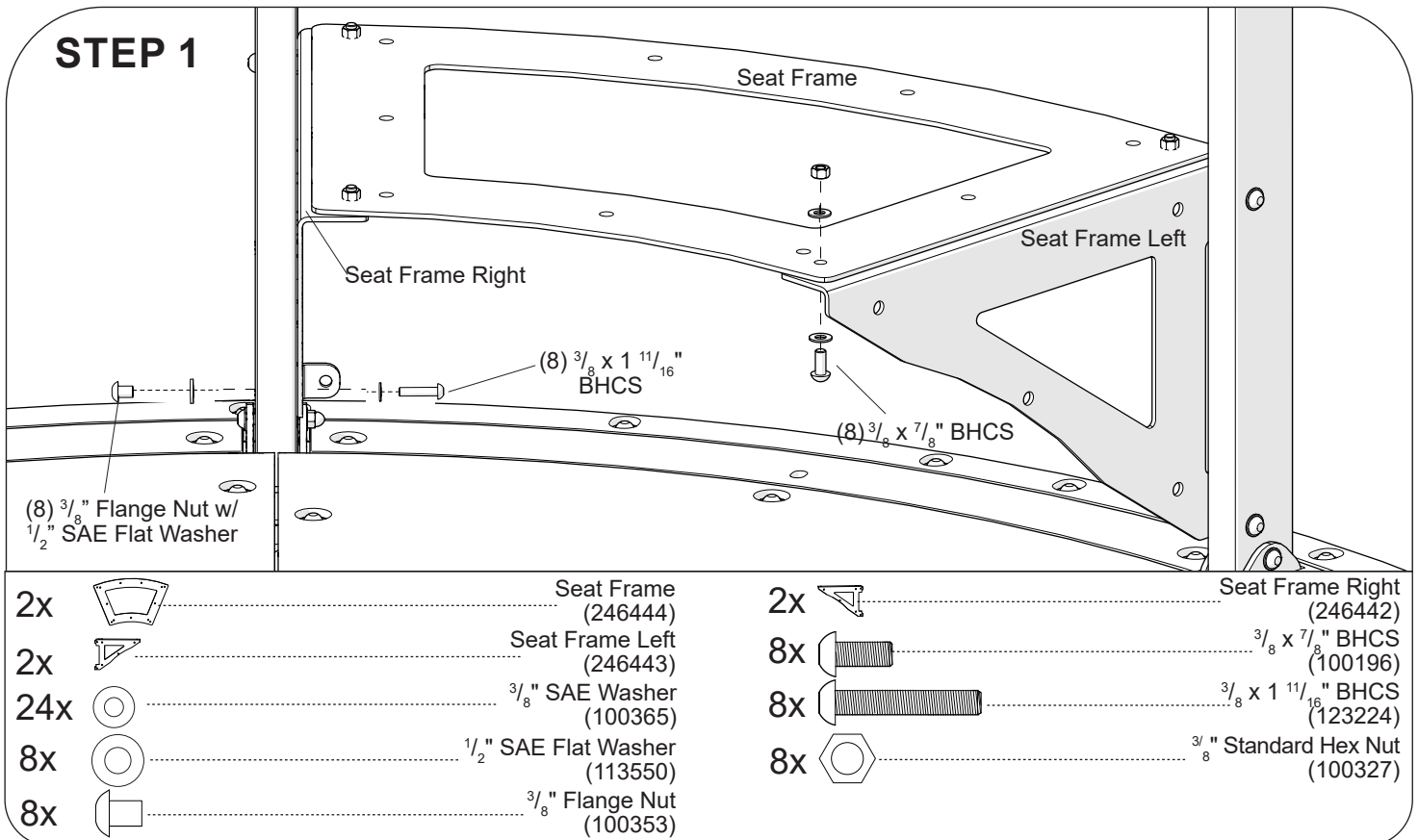
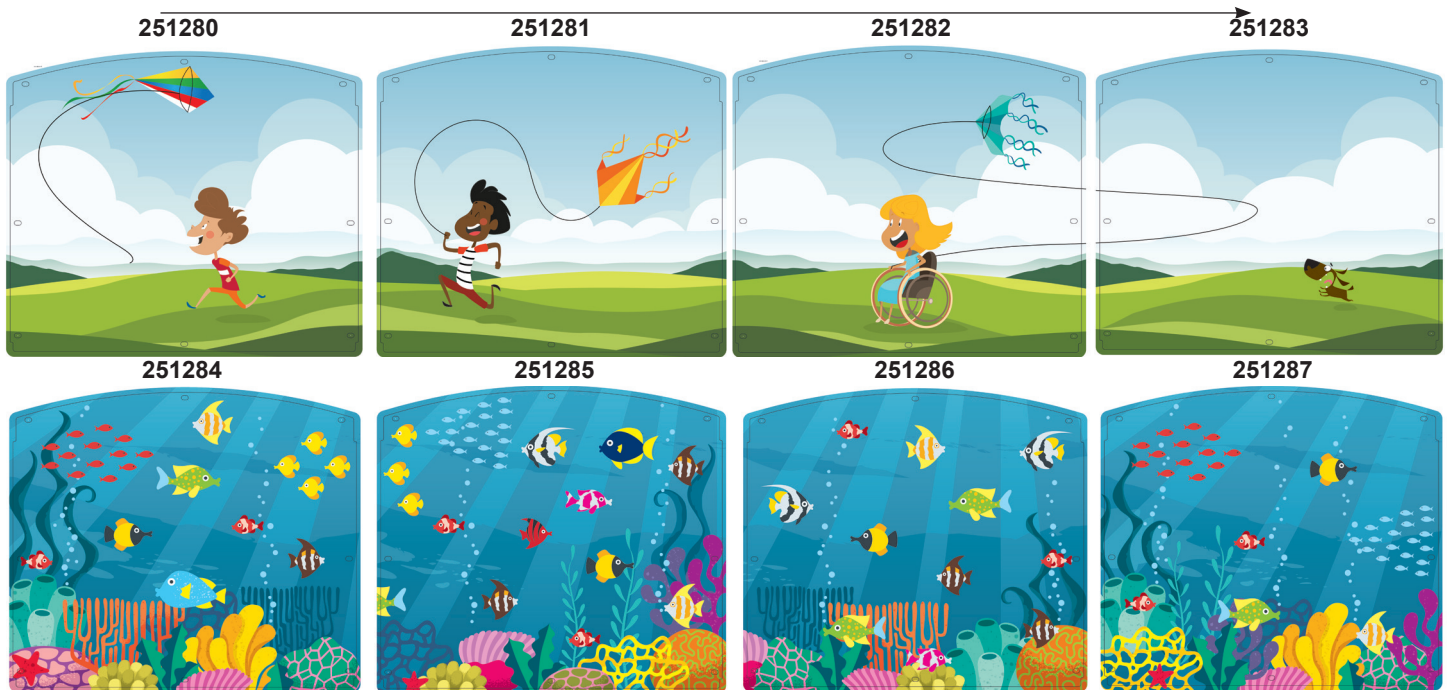


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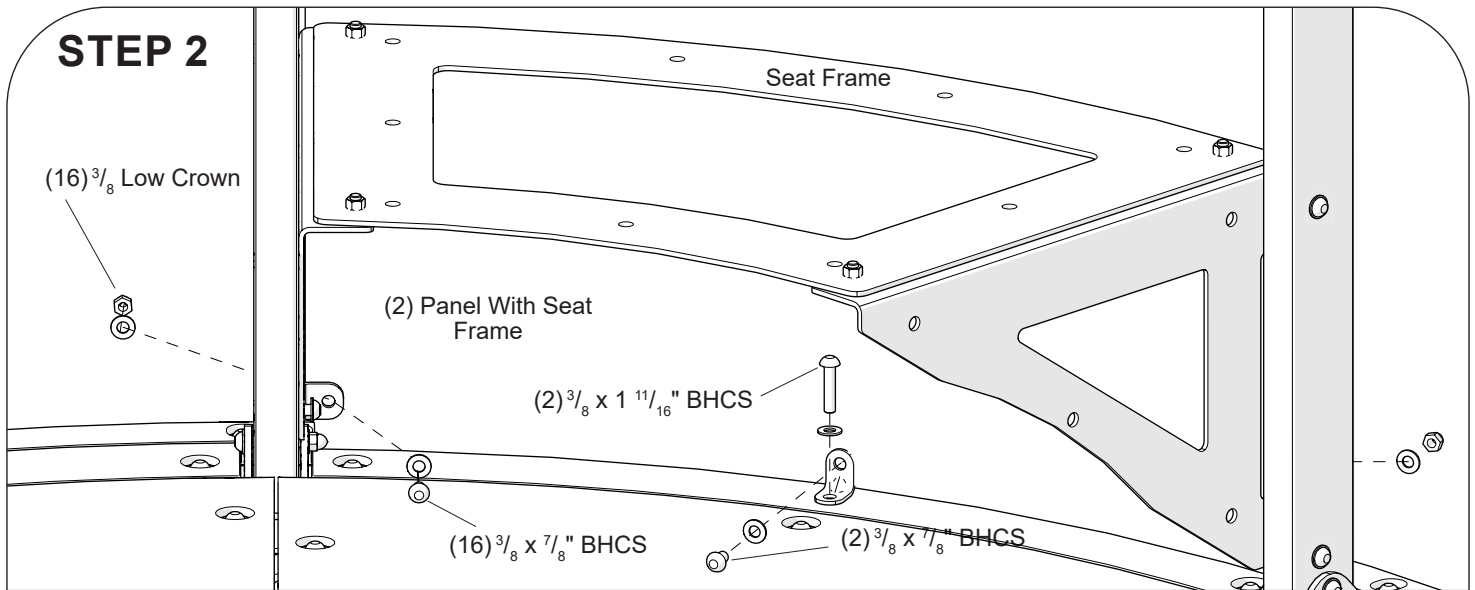
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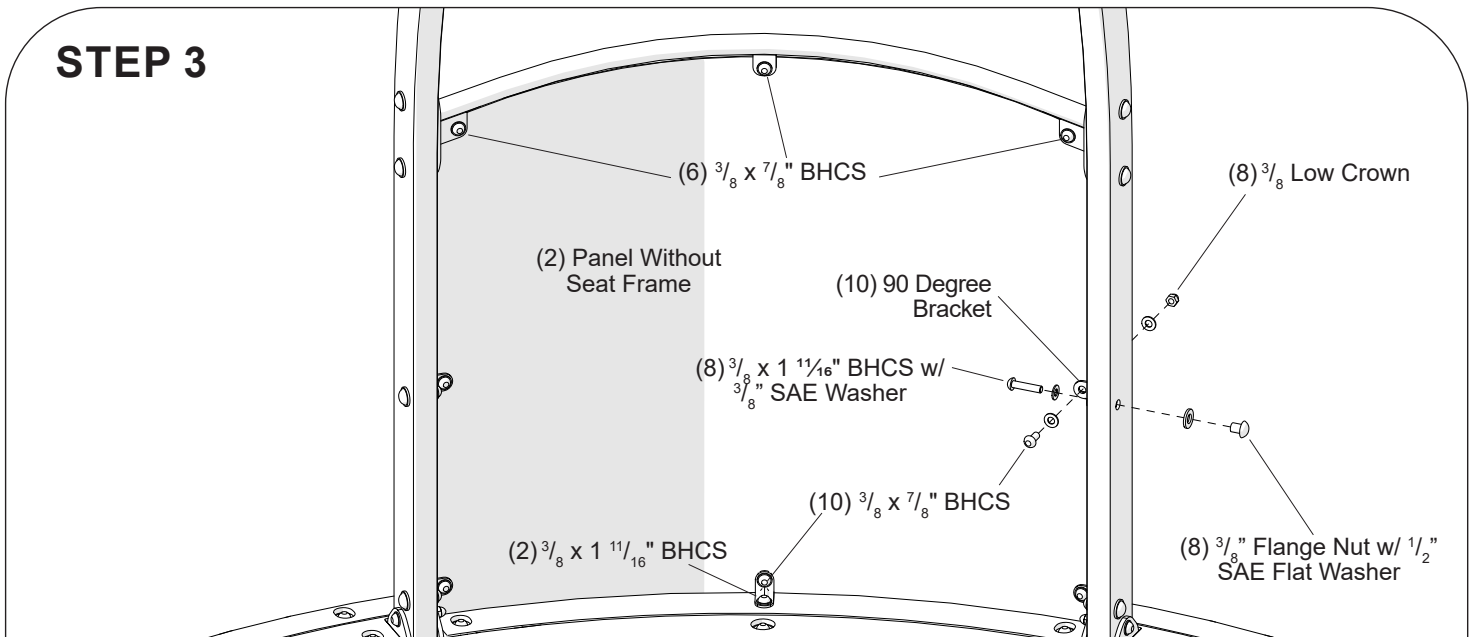
NOTE: Document shows quantities for 2 seat configuration. When assembling a 3 seat configuration refer to quantities in the bill of materials.

STEP 2



16x		3/8" Low Crown Hex Nut (100349)	34x		3/8" SAE Washer (100365)
16x		3/8 x 7/8" BHCS (100196)	2x		90 Degree Bracket (147807)
2x		3/8 x 1 11/16" BHCS (123224)	2x		Perf Panel (246428)

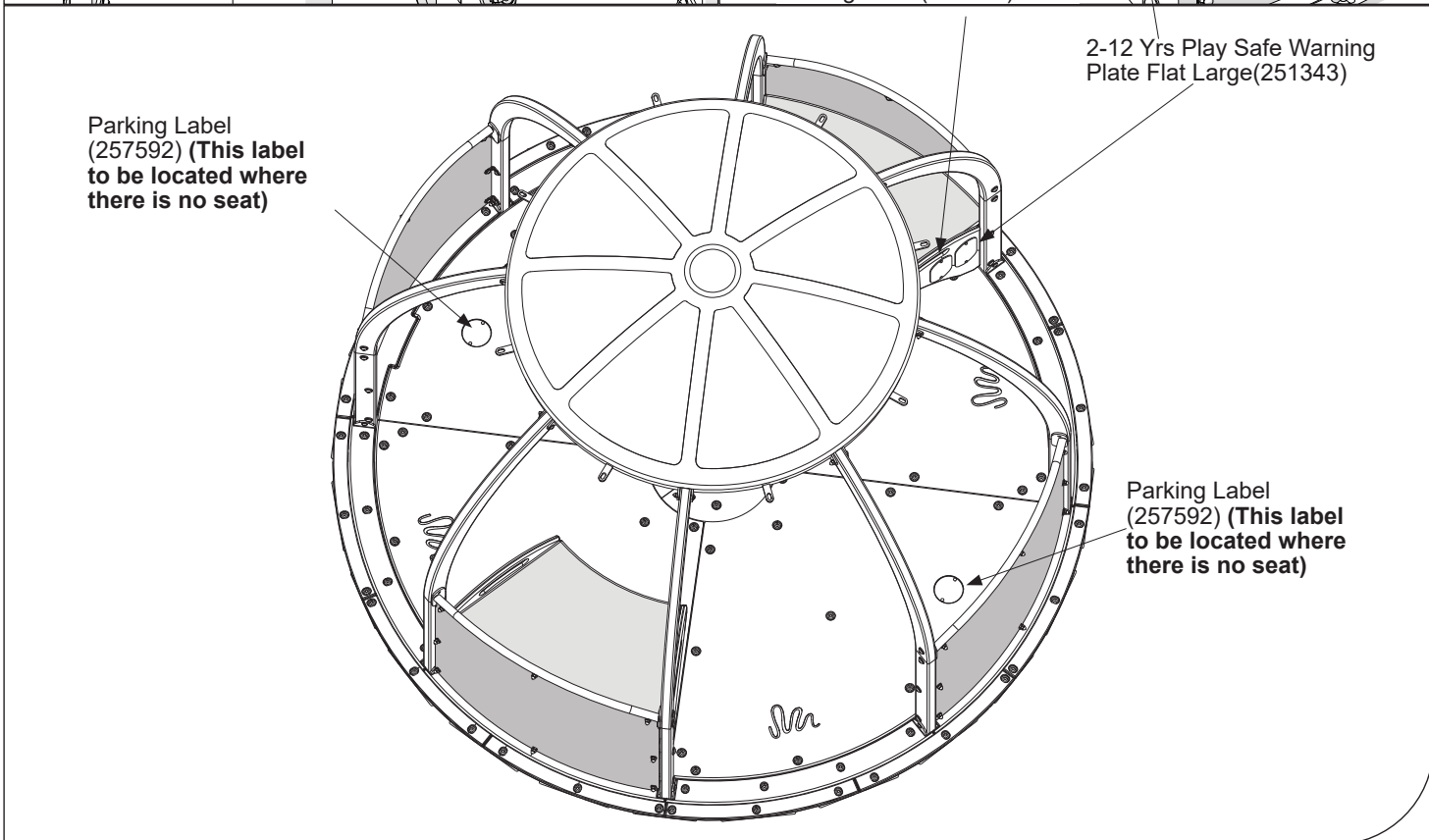
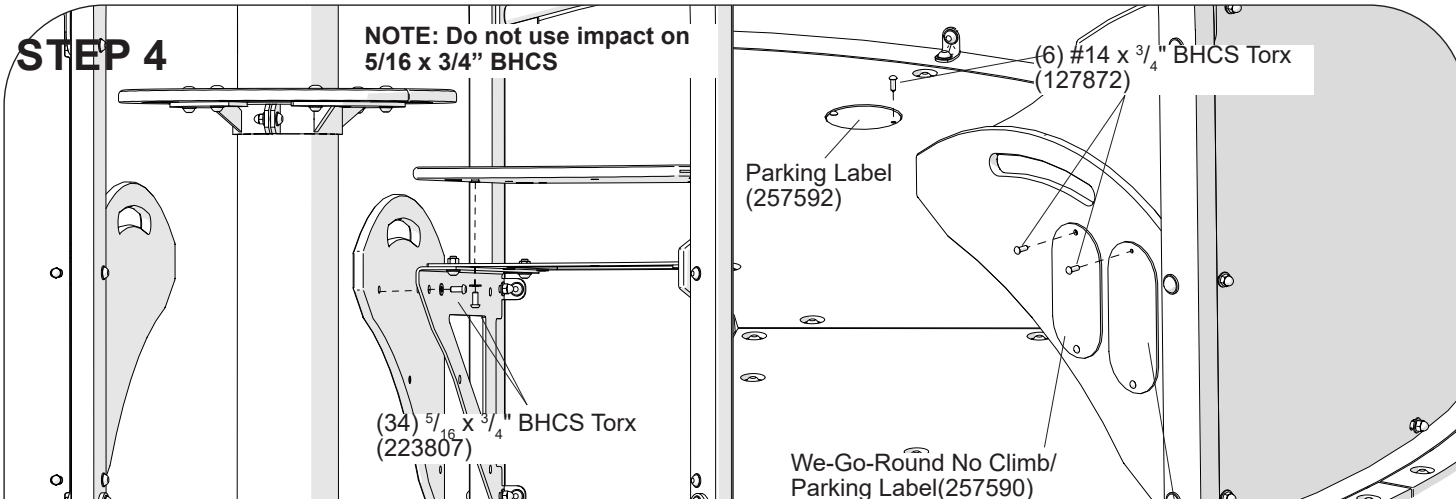
STEP 3



2x		Perf Panel (246428)	10x		90 Degree Bracket (147807)
16x		3/8" Low Crown Hex Nut (100349)	42x		3/8" SAE Washer (100365)
10x		3/8 x 1 11/16" BHCS (123224)	8x		3/8" Flange Nut (100353)
16x		3/8 x 7/8" BHCS (100196)	8x		1/2" SAE Flat Washer (113550)

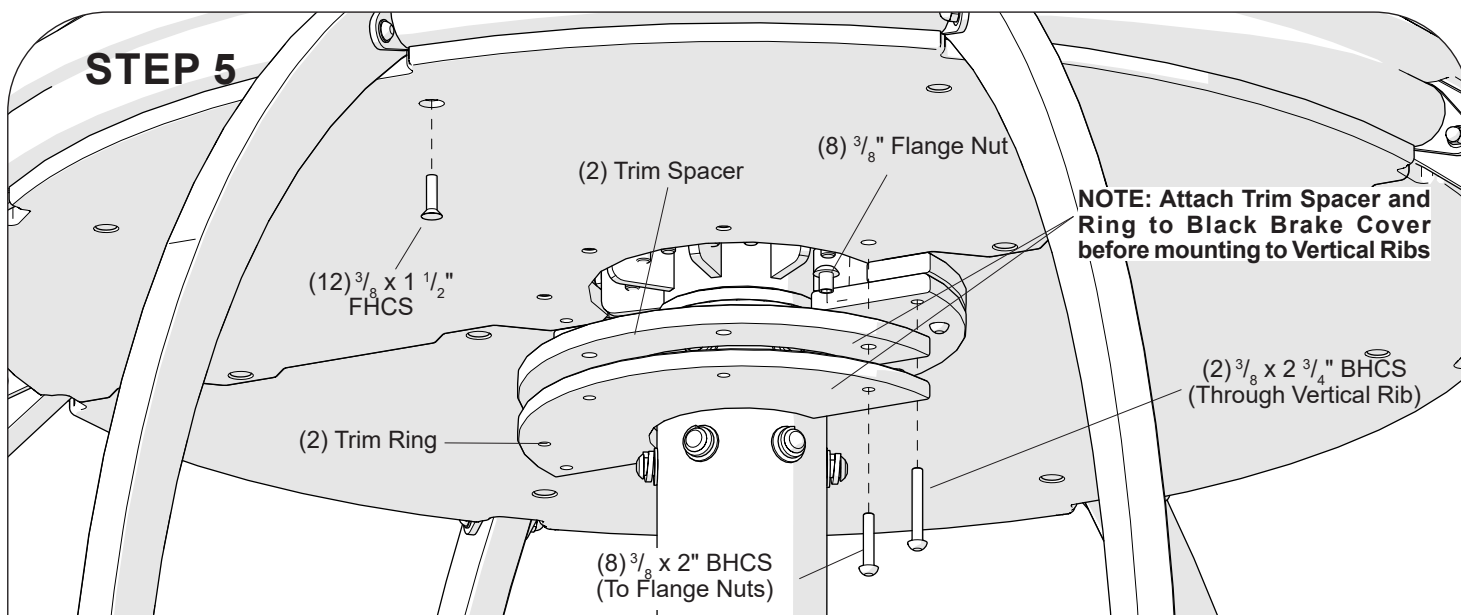
STEP 4

**NOTE: Do not use impact on
5/16 x 3/4" BHCS**



2x		Seat Top (246425)	2x		Seat Panel Right (246427)
2x		Seat Panel Left (246426)	34x		5/16 x 3/4" BHCS Torx (223807)
34x		5/16" SAE Flat Washer (223956)	6x		#14 x 3/4" BHCS Torx (127872)
1x		Parking Label (257592)	1x		2-12 Yrs Play Safe Warning Plate Flat Large (251343)
1x		Warning No Climb/Parking Label (257590)			

STEP 5



2x		Black Brake Cover (215887)	2x		Trim Ring (218445)
2x		Black Trim Spacer (218444)	8x		$\frac{3}{8}$ x 2" BHCS (100173)
2x		$\frac{3}{8}$ x $2\frac{3}{4}$ " BHCS (100175)	12x		$\frac{3}{8}$ x $1\frac{1}{2}$ " FHCS (151421)
8x		$\frac{3}{8}$ " Flange Nut (100353)			



Parts List - 2 Seat Option

Part#	Description	Qty.
147807	Angle Brkt Pnt, Specify Color	12
292617	Bushing Uhmw 6" Tube	2
212866	Globe Pipe Bottom W/Out Net, Specify Color	8
215474	Globe Spinner Top Roto, Specify Color	1
215887	Globe Brake Cover, Black in Color	2
254134	1.25 Offset Bearing + Hub Asm	1
218444	Trim Spacer Globe, Black in Color	2
218445	Trim Ring Globe, Black in Color	2
222306	Global Motion® Hub Clamp Sst	1
222399	#3 Rebar X 18"	2
246424	Ctr Ring Perm, Specify Color	2
246425	Seat Pnl Top, Specify Color	2
246426	Seat Pnl Lh, Specify Color	2
246427	Seat Pnl Rh, Specify Color	2
297889	Main Deck Gripx, Black in Color	4
246435	Ctr Deck Gripx, Black in Color	2
246441	Otr Ring Perm 4 Hole, Black in Color	4
246442	Seat Frm Rh Pnt, Specify Color	2
246443	Seat Frm Lh Pnt, Specify Color	2
246444	Seat Frm Plt Pnt, Specify Color	2
297891	Otr Ring Perm With Tab Slot, Black in Color	4
258597	Otr Skirt Gripx A, Gray in color	6
258598	Otr Skirt Gripx B, Gray in color	6
248520	Btm Rib Mnt Machined	1
249255	Vert Rib With Mtg Pin 4 Inserts Pnt, Specify Color	2
249257	Vert Rib Wout Mtg Pin Pnt, Specify Color	4
249259	Vert Rib With Mtg Pin 1 Insert Pnt, Specify Color	2
249265	Arch Pnl Sprt Weldt Pnt, Specify Color	4
249266	7 Flg Btm Rib Pnt, Specify Color	4
249267	3 Flg Btm Rib Pnt, Specify Color	4
249268	Ctr Post Ring Weldt Pnt, Specify Color	2
289361	6.0 OD x .25 x 119.5" Zp Post Pnt, Specify Color	1
249286	Horiz Btm Sprt Weldt Pnt, Specify Color	8
249289	Otr Skirt Weldt Pnt, Specify Color	6
249292	Rib Clmp, Install Weldt Pnt, Specify Color	4
249295	Rib, Install Pnt, Specify Color	6
249297	Rib Ftr, Install Pnt, Specify Color	6
249299	Rib Brkt, Install Pnt, Specify Color	12
250371	Otr Ring Plt Pnt, Specify Color	4
250643	4" X 300" Perf Drain Pipe	1
250644	4" Flexible Drain Tee	1
250645	4" Drain Cap	2
251007	4" Drain Coupler	2
215884	70 Series Shock	4
*	DigiFuse Panels (Refer to Interior II, Pg. 17)	4
253792	9" Plate Pnt, Specify Color	12
XXXXXX	Custom Artwork Panel	*
254468	Bushing Belt , Black	1

250568	Hdw Pkg We-Go-Round Rib Plates Asm	1
100206	Hex Cap 3/8X1i Sst Pat	36
100208	Hex Cap 3/8X1-1/2 Sst Pat	4
100327	Nut Hex Std 3/8-16 Sst	40
100365	Washer Flat Sae 3/8I Sst	82
100610	Rivet 1/4X5/8I Drv As	2
168198	Lag Scr Bh 6Lp 3/8X1-1/2I	2

253850	Hdw Pkg We-Go-Round Skirt Asm	1
100198	Bhcs 6Lp 3/8X1-1/8I Sst	60
100362	Washer Flat 3/8I Sst	60

289338	Hdw Pkg We-Go-Round Hub/Bushings	1
100201	Bhcs 6Lp 5/8X1-1/2I Sst	12
100611	Rivet 1/4X3/8I Drv As	12
109680	Cable Tie 5-3/4I Black	1
129500	Washer Flat Sae 5/8I Sst	12
136931	Nut Hex Nylok 3/8-16 Sst	8
175652	Washer Lock Spring 5/8I Sst	12

250580	Hdw Pkg We-Go-Round Frame Asm	1
100174	Bhcs 6Lp 3/8X2-1/2I Sstpat	32
100198	Bhcs 6Lp 3/8X1-1/8I Sst	32
100327	Nut Hex Std 3/8-16 Sst	32
100349	Nut L/C Cap 3/8-16 Sst	32
100365	Washer Flat Sae 3/8I Sst	128
113550	Washer Flat Sae 1/2I Sst	32
129692	Nut Hex Std 1/2-13 Sstpat	16
131862	Hex Cap 1/2X2-1/4 Sst	16

250586	Hdw Pkg We-Go-Round Brake Cover	1
100173	Bhcs 6Lp 3/8X2i Sst Pat	16
100175	Bhcs 6Lp 3/8X2-3/4I Sst	2
100353	Flg Nut 6Lp 3/8-16 Sst	8
100365	Washer Flat Sae 3/8I Sst	8
151421	Fhcs 6Lp 3/8X1-1/2I Sst W/Patch	12

250587	Hdw Pkg We-Go-Round Perf Panel W/O Seat	2
100196	Bhcs 6Lp 3/8X7/8I Sst	8
100349	Nut L/C Cap 3/8-16 Sst	8
100353	Flg Nut 6Lp 3/8-16 Sst	8
100365	Washer Flat Sae 3/8I Sst	25
113550	Washer Flat Sae 1/2I Sst	8
123224	Bhcs 6Lp 3/8X1-11/16I Sst	9

293793	Hdw Pkg We-Go-Round Perf Panel W/Seat	2
100196	Bhcs 6Lp 3/8X7/8I Sst	12
100327	Nut Hex Std 3/8-16 Sst	4
100349	Nut L/C Cap 3/8-16 Sst	8
100353	Flg Nut 6Lp 3/8-16 Sst	8
100365	Washer Flat Sae 3/8I Sst	33
113550	Washer Flat Sae 1/2I Sst	8
123224	Bhcs 6Lp 3/8X1-11/16I Sst	9
223807	Bhcs 6Lp 5/16I -18 X 3/4I Sst	17
223956	Washer Flat Sae 5/16I Sst	17

258581	Hdw Pkg We-Go-Round Decking	1
100362	Washer Flat 3/8I Sst	80
113027	Bhcs 6Lp 3/8X1-3/8I Sst	80

250590	Hdw Pkg We-Go-Round Center Ring	1
100196	Bhcs 6Lp 3/8X7/8I Sst	6
100198	Bhcs 6Lp 3/8X1-1/8I Sst	2
100349	Nut L/C Cap 3/8-16 Sst	2
100353	Flg Nut 6Lp 3/8-16 Sst	6
100365	Washer Flat Sae 3/8I Sst	10

258556	Hdw Pkg We-Go-Round Labels	1
127463	Bit Hex Tpp T27 (Torx)	1
127872	Bhcs Torx #14 X 3/4 Sst Thread Type Ab	8
251343	2-12 Yrs Play Safe Warning Plate Flat Large	1
257590	No Climb/Parking Plate	1
257592	Parking Plate	2

DB = Direct Bury



Parts List - 3 Seat Option

Part#	Description		
Qty.			
147807	Angle Brkt Pnt, Specify Color	8	
292617	Bushing Uhmw 6" Tube	2	
212866	Globe Pipe Bottom W/Out Net, Specify Color	8	
215474	Globe Spinner Top Roto, Specify Color	1	
215887	Globe Brake Cover, Black in Color	2	
254134	1.25 Offset Bearing + Hub Asm	1	
218444	Trim Spacer Globe, Black in Color	2	
218445	Trim Ring Globe, Black in Color	2	
222306	Global Motion® Hub Clamp Sst	1	
222399	#3 Rebar X 18"	2	
246424	Ctr Ring Perm, Specify Color	2	
246425	Seat Pnl Top, Specify Color	3	
246426	Seat Pnl Lh, Specify Color	3	
246427	Seat Pnl Rh, Specify Color	3	
297889	Main Deck Gripx, Black in Color	4	
246435	Ctr Deck Gripx, Black in Color	2	
246441	Otr Ring Perm 4 Hole, Black in Color	4	
246442	Seat Frm Rh Pnt, Specify Color	3	
246443	Seat Frm Lh Pnt, Specify Color	3	
246444	Seat Frm Plt Pnt, Specify Color	3	
297891	Otr Ring Perm With Tab Slot, Black in Color	4	
258597	Otr Skirt GripX A, Gray in color	6	
258598	Otr Skirt GripX B, Gray in color	6	
248520	Btm Rib Mnt Machined	1	
249255	Vert Rib With Mtg Pin 4 Inserts Pnt, Specify Color	2	
249257	Vert Rib Wout Mtg Pin Pnt, Specify Color	4	
249259	Vert Rib With Mtg Pin 1 Insert Pnt, Specify Color	2	
249265	Arch Pnl Sprt Weldt Pnt, Specify Color	4	
249266	7 Flg Btm Rib Pnt, Specify Color	4	
249267	3 Flg Btm Rib Pnt, Specify Color	4	
249268	Ctr Post Ring Weldt Pnt, Specify Color	2	
289361	6.0 OD x .25 x 119.5" ZP Post Pnt, Specify Color	1	
249286	Horiz Btm Sprt Weldt Pnt, Specify Color	8	
249289	Otr Skirt Weldt Pnt, Specify Color	6	
249292	Rib Clmp, Install Weldt Pnt, Specify Color	4	
249295	Rib, Install Pnt, Specify Color	6	
249297	Rib Ftr, Install Pnt, Specify Color	6	
249299	Rib Brkt, Install Pnt, Specify Color	12	
250371	Otr Ring Plt Pnt, Specify Color	4	
215884	70 Series Shock	4	
250643	4" x 300" Perf Drain Pipe	1	
250644	4" Flexible Drain Tee	1	
250645	4" Drain Cap	2	
251007	4" Drain Coupler	2	
*	DigiFuse Panels (Refer to Interior II, Pg. 17)	4	
253792	9" Plate Pnt, Specify Color	12	
XXXXXX	Custom Artwork Panel	*	
254468	Bushing Belt, Black	1	
250568	Hdw Pkg We-Go-Round Rib Plates Asm	1	
100206	Hex Cap 3/8X1i Sst Pat	36	
100208	Hex Cap 3/8X1-1/2 Sst Pat	4	
100327	Nut Hex Std 3/8-16 Sst	40	
100365	Washer Flat Sae 3/8I Sst	82	
100610	Rivet 1/4X5/8I Drv As	2	
168198	Lag Scr Bh 6Lp 3/8X1-1/2I	2	
253850	Hdw Pkg We-Go-Round Skirt Asm	1	
100198	Bhcs 6Lp 3/8X1-1/8I Sst	60	
100362	Washer Flat 3/8I Sst	60	
289338	Hdw Pkg We-Go-Round Hub/Bushings	1	
100201	Bhcs 6Lp 5/8X1-1/2I Sst	12	
100611	Rivet 1/4X3/8I Drv As	12	
109680	Cable Tie 5-3/4I Black	1	
129500	Washer Flat Sae 5/8I Sst	12	
136931	Nut Hex Nylok 3/8-16 Sst	8	
175652	Washer Lock Spring 5/8I Sst	12	
250580	Hdw Pkg We-Go-Round Frame Asm	1	
100174	Bhcs 6Lp 3/8X2-1/2Isstpat	32	
100198	Bhcs 6Lp 3/8X1-1/8I Sst	32	
100327	Nut Hex Std 3/8-16 Sst	32	
100349	Nut L/C Cap 3/8-16 Sst	32	
100365	Washer Flat Sae 3/8I Sst	128	
113550	Washer Flat Sae 1/2I Sst	32	
129692	Nut Hex Std 1/2-13 Sstpat	16	
131862	Hex Cap 1/2X2-1/4 Sst	16	
250586	Hdw Pkg We-Go-Round Brake Cover	1	
100173	Bhcs 6Lp 3/8X2i Sst Pat	16	
100175	Bhcs 6Lp 3/8X2-3/4I Sst	2	
100353	Flg Nut 6Lp 3/8-16 Sst	8	
100365	Washer Flat Sae 3/8I Sst	8	
151421	Fhcs 6Lp 3/8X1-1/2Isst W/Patch	12	
250587	Hdw Pkg We-Go-Round Perf Panel W/O Seat	1	
100196	Bhcs 6Lp 3/8X7/8I Sst	8	
100349	Nut L/C Cap 3/8-16 Sst	8	
100353	Flg Nut 6Lp 3/8-16 Sst	8	
100365	Washer Flat Sae 3/8I Sst	25	
113550	Washer Flat Sae 1/2I Sst	8	
123224	Bhcs 6Lp 3/8X1-11/16I Sst	9	
293793	Hdw Pkg We-Go-Round Perf Panel W/Seat	3	
100196	Bhcs 6Lp 3/8X7/8I Sst	12	
100327	Nut Hex Std 3/8-16 Sst	4	
100349	Nut L/C Cap 3/8-16 Sst	8	
100353	Flg Nut 6Lp 3/8-16 Sst	8	
100365	Washer Flat Sae 3/8I Sst	33	
113550	Washer Flat Sae 1/2I Sst	8	
123224	Bhcs 6Lp 3/8X1-11/16I Sst	9	
223807	Bhcs 6Lp 5/16I -18 X 3/4I Sst	17	
223956	Washer Flat Sae 5/16I Sst	17	
258581	Hdw Pkg We-Go-Round Decking	1	
100362	Washer Flat 3/8I Sst	80	
113027	Bhcs 6Lp 3/8X1-3/8I Sst	80	
250590	Hdw Pkg We-Go-Round Center Ring	1	
100196	Bhcs 6Lp 3/8X7/8I Sst	6	
100198	Bhcs 6Lp 3/8X1-1/8I Sst	2	
100349	Nut L/C Cap 3/8-16 Sst	2	
100353	Flg Nut 6Lp 3/8-16 Sst	6	
100365	Washer Flat Sae 3/8I Sst	10	
258558	Hdw Pkg We-Go-Round Labels	1	
127463	Bit Hex Tpp T27 (Torx)	1	
127872	Bhcs Torx #14 X 3/4 Sst Thread Type Ab	6	
251343	2-12 Yrs Play Safe Warning Plate Flat Large	1	
257590	No Climb/Parking Plate	1	
257592	Parking Plate	1	

DB = Direct Bury



Specifications

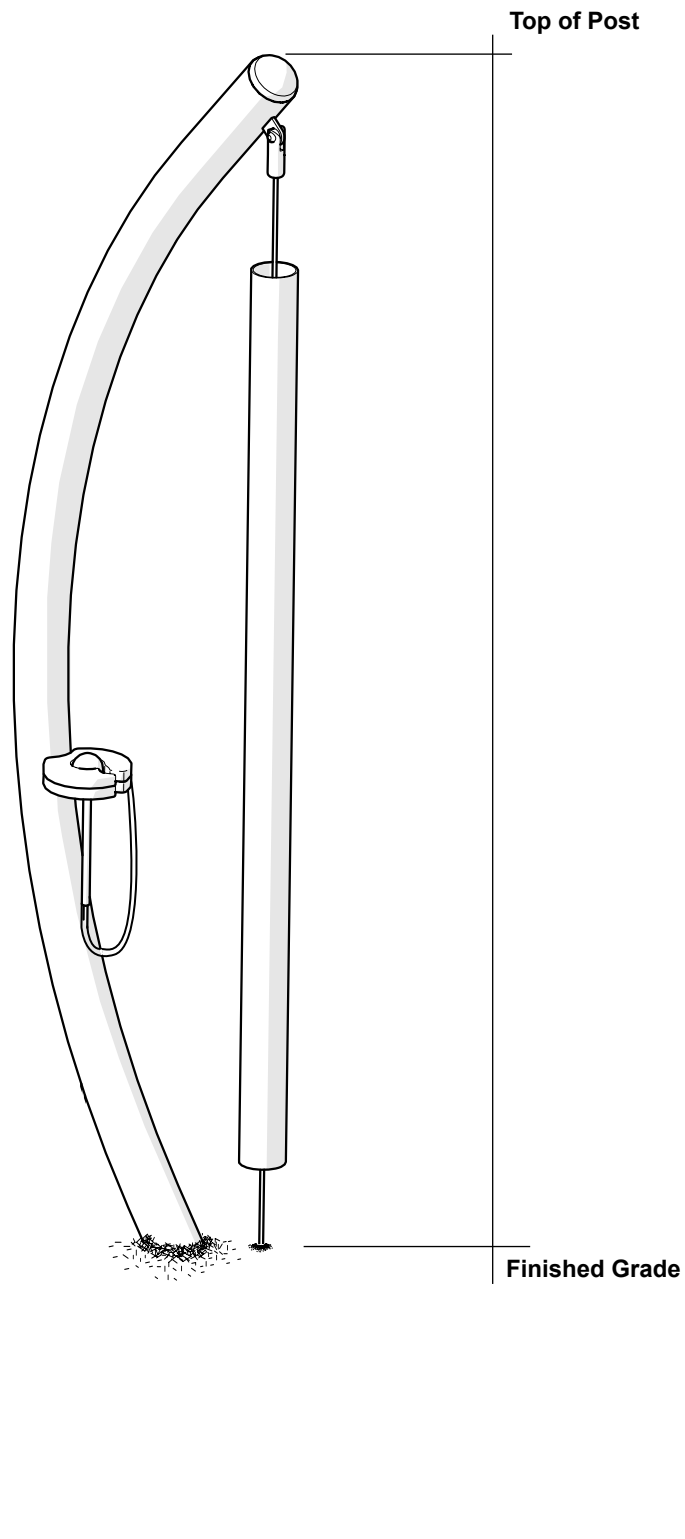
Kids In Motion 249558 We-Go-Round™ w/DigiFuse

Center Post:	6.000" (152 mm) O.D. x (.250")(6,35 mm) wall HR Black D.O.M. zinc plated steel Tube. Finish: ProShield®, color specified.
Shock:	70 Series.
GripX Platform:	3/4" (19,05 mm) Thick recycled Permalene®, black in color.
Brake Cover:	Recycled Permalene, black in color.
Mounting Hub Assembly:	Comprised of 1/2" (12,7 mm) thick stainless steel plate, 11 Ga. (.120")(3,05 mm) stainless steel sheet, steel bearing shaft.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Bottom Rib:	7GA. (.179")(4,54 mm) Thick HRPO steel plate. Finish: ProShield, black in color.
Middle & Bottom Pipe:	Weldment comprised of 2.375" (60,32 mm) O.D. RS20 (.095"-.105")(2,41 mm-2,66 mm) galvanized steel tube, 1/4" (6,35 mm) thick HRPO steel plate and 3/8" (9,52 mm) thick stainless steel tab. Finish: ProShield, color specified.
Base Bushing:	Oil-Filled UHMW PE.
Spinner Top:	Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
Rib:	Weldment comprised of 1.5" (38, 1 mm) x 3.0" (76, 2 mm) x (.180" (4, 57 mm) wall HRPO steel tube, 3/8" (9, 52 mm) thick stainless steel tab, 3/8" (9, 52 mm) O.D. stainless steel pin. 3/8" (9, 52 mm) thick HRPO steel plate with 1/4" (6, 35 mm) thick HRPO steel plate. Finish: ProShield®, color specified.
Bottom Mount:	Weldment comprised of 7.000" (177 mm) O.D. x .188" (4, 77 mm) wall stainless steel tube and 1/4" (6, 35 mm) thick stainless steel plate.
Seat Permalene Panels:	3/4" thick recycled permalene, specify color
Seat Frame:	Comprised of 7 GA (.179") (4, 54 mm) thick HRPO steel plate. Finish: ProShield, specify color
DigiFuse Panel:	Made from (.120") thick aluminum sheet. Dye sublimation printed digital artwork is fused onto the powdercoated substrate.
Drain Pipe :	Comprised of 4" x 25' polypropylene perforated pipe.

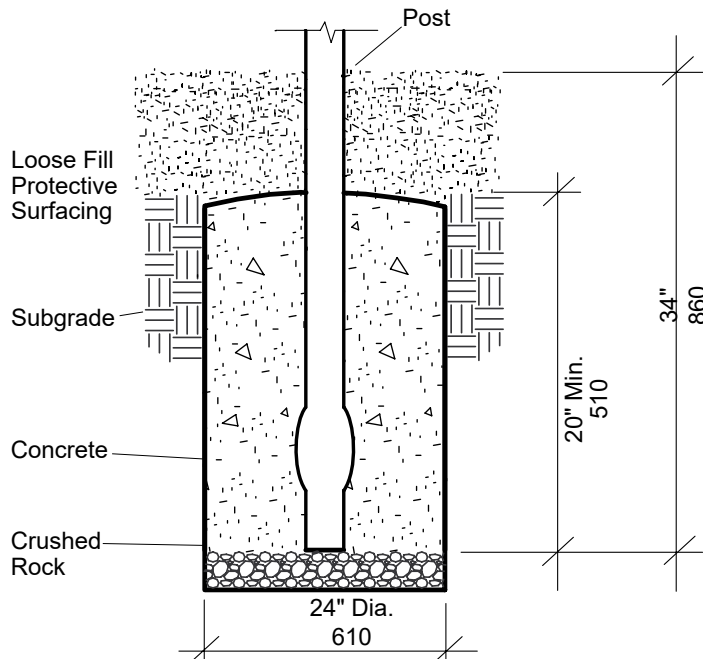
Installation Time:	DB - Approx. 40 person hours
Concrete Req.:	DB - Approx. 2.07 yards - Square Footer DB - Approx. 1.5 yards. - If concrete is chosen in Foundation II - Step 4 detail.
Weight:	DB 2 Seat - 2107 lbs. DB 3 Seat - 2165 lbs.
Minimum Area Req.:	DB - 20' 10" (6.35 m)
Fall Height:	DB - 40"

SAFETY NOTE

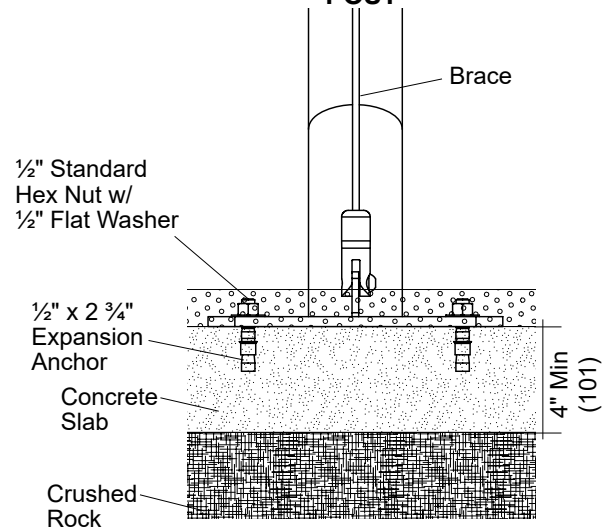
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)



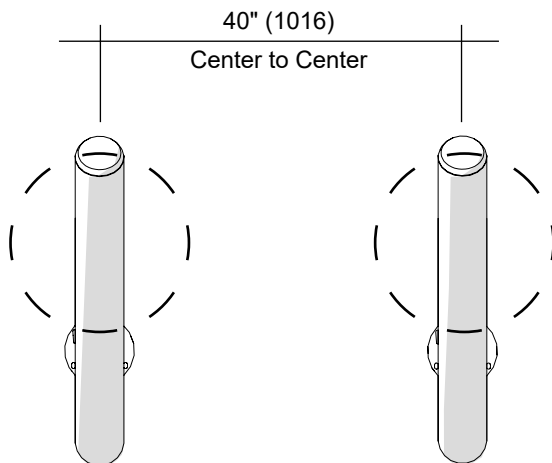
DETAIL DIRECT BURY



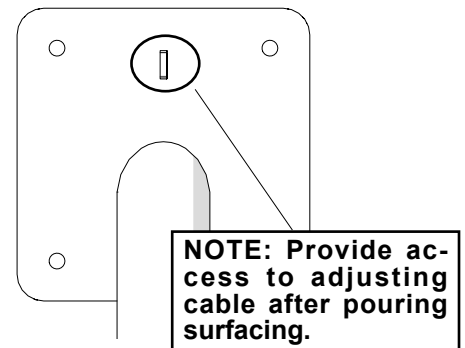
DETAIL SURFACE MOUNT POST



DETAIL Plan View

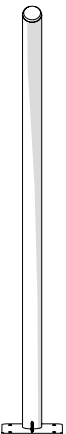
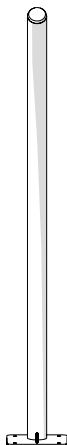
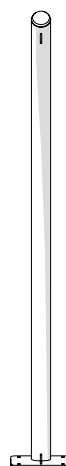
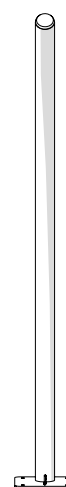
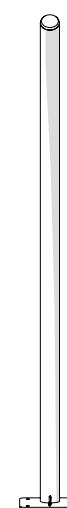

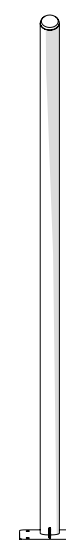
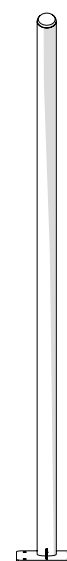


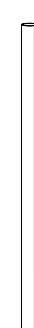



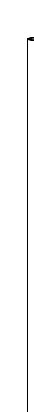











DETAIL SURFACE MOUNT

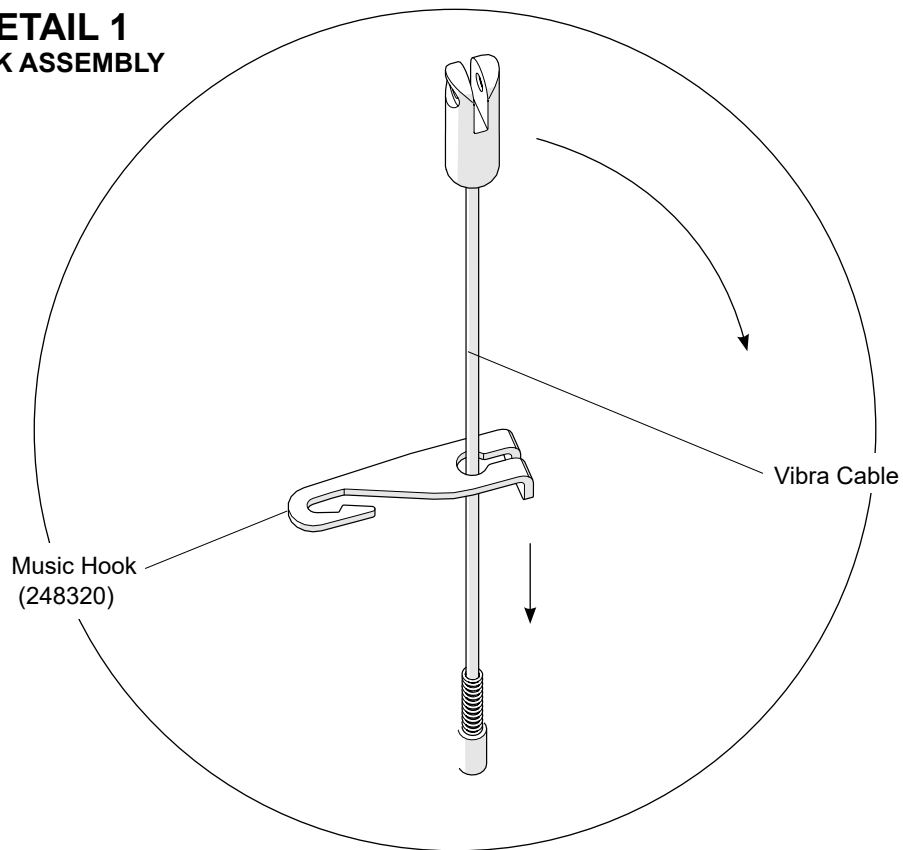


DETAIL

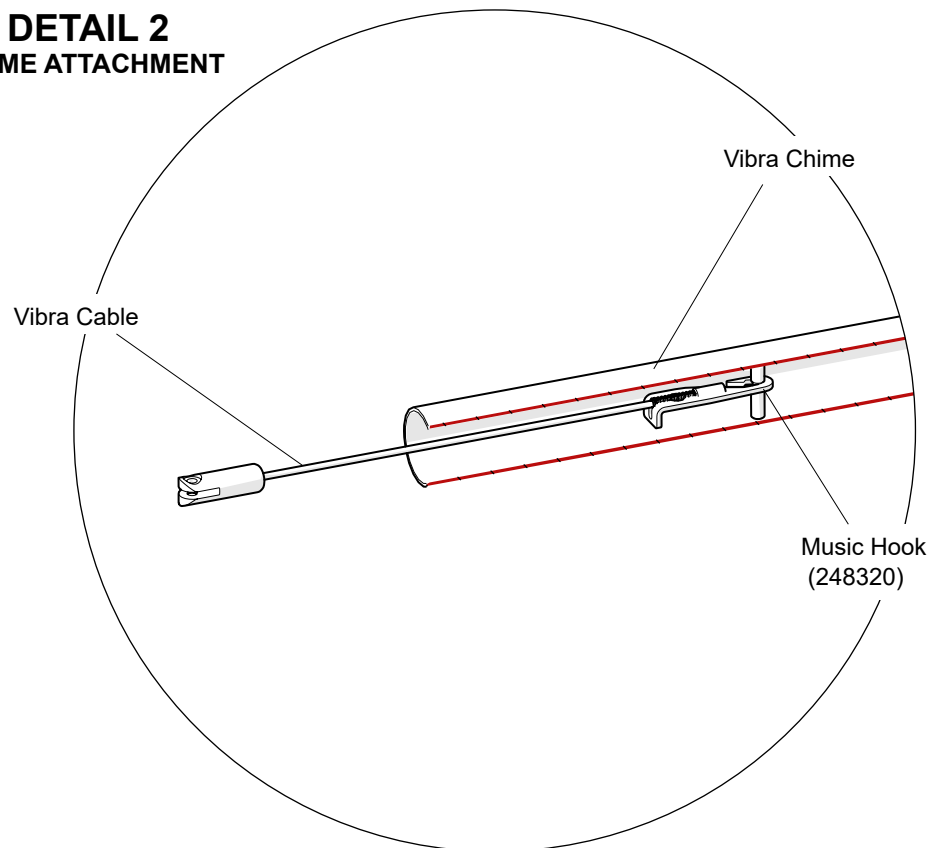
Vibra® Chime Assembly Pairings

	Vibra® Chime 8	Vibra® Chime 7	Vibra® Chime 6	Vibra® Chime 5	Vibra® Chime 4	Vibra® Chime 3	Vibra® Chime 2	Vibra® Chime 1
								
	DB 251267 SM 248369 78" (1982)	DB 251268 SM 248372 80" (2032)	DB 251269 SM 248373 83" (2108)	DB 251270 SM 248374 86.5" (2197)	DB 251271 SM 248375 90" (2286)	DB 251272 SM 248376 92" (2336)	DB 251273 SM 248377 96" (2438)	DB 251274 SM 248378 100.25" (2546)
Vibra Frames								
								
	245516 52.5" (1320)	245514 54" (1371)	245513 57" (1447)	245512 60.5" (1536)	245511 64" (1625)	245510 66" (1676)	245509 70" (1778)	245508 74" (1879)
Vibra Notes								
								
	248386 (2) 18 3/4" (476)	248385 (2) 19 1/4" (489)	248384 (2) 20" (508)	248383 (2) 20 3/4" (527)	248382 (2) 21 1/2" (546)	248381 (2) 22" (558)	248380 (2) 22 7/8" (581)	248379 (2) 23 3/4" (603)
Vibra Cables								

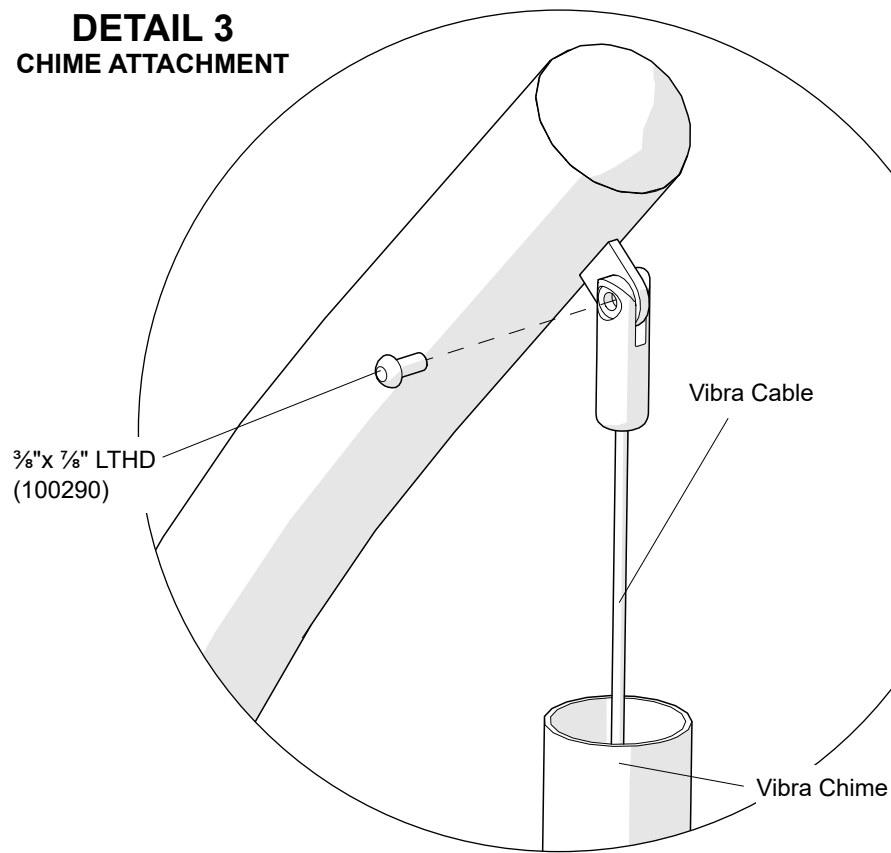
DETAIL 1 HOOK ASSEMBLY



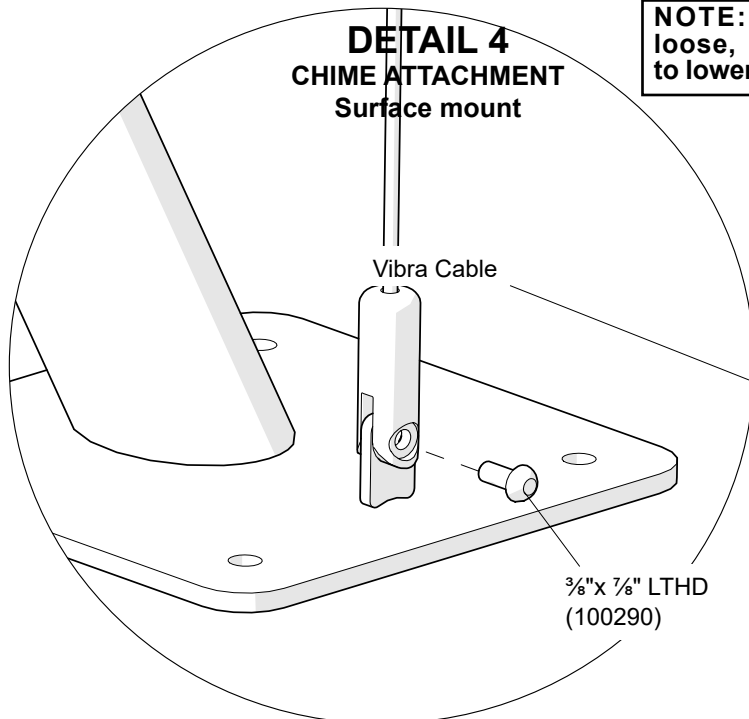
DETAIL 2 CHIME ATTACHMENT



DETAIL 3 CHIME ATTACHMENT

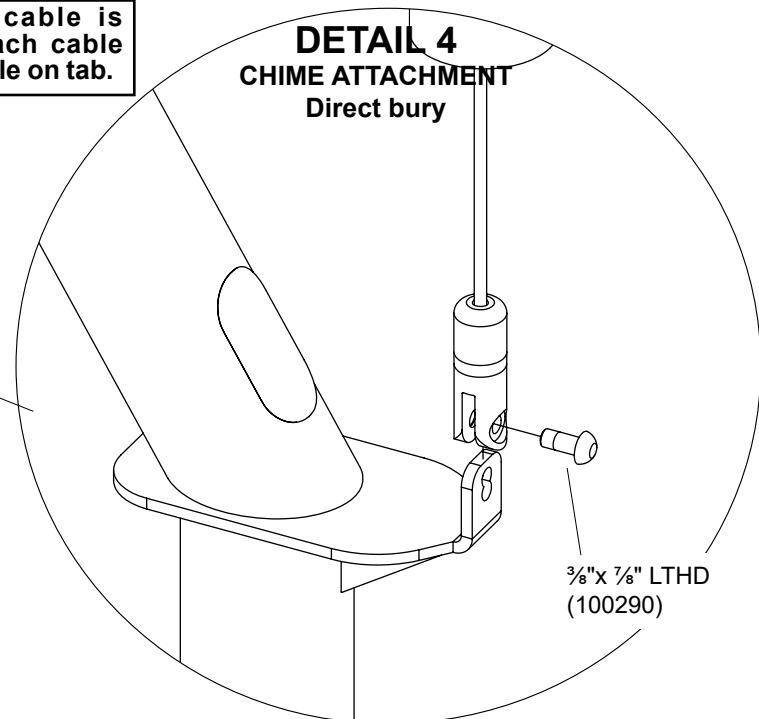


DETAIL 4 CHIME ATTACHMENT Surface mount

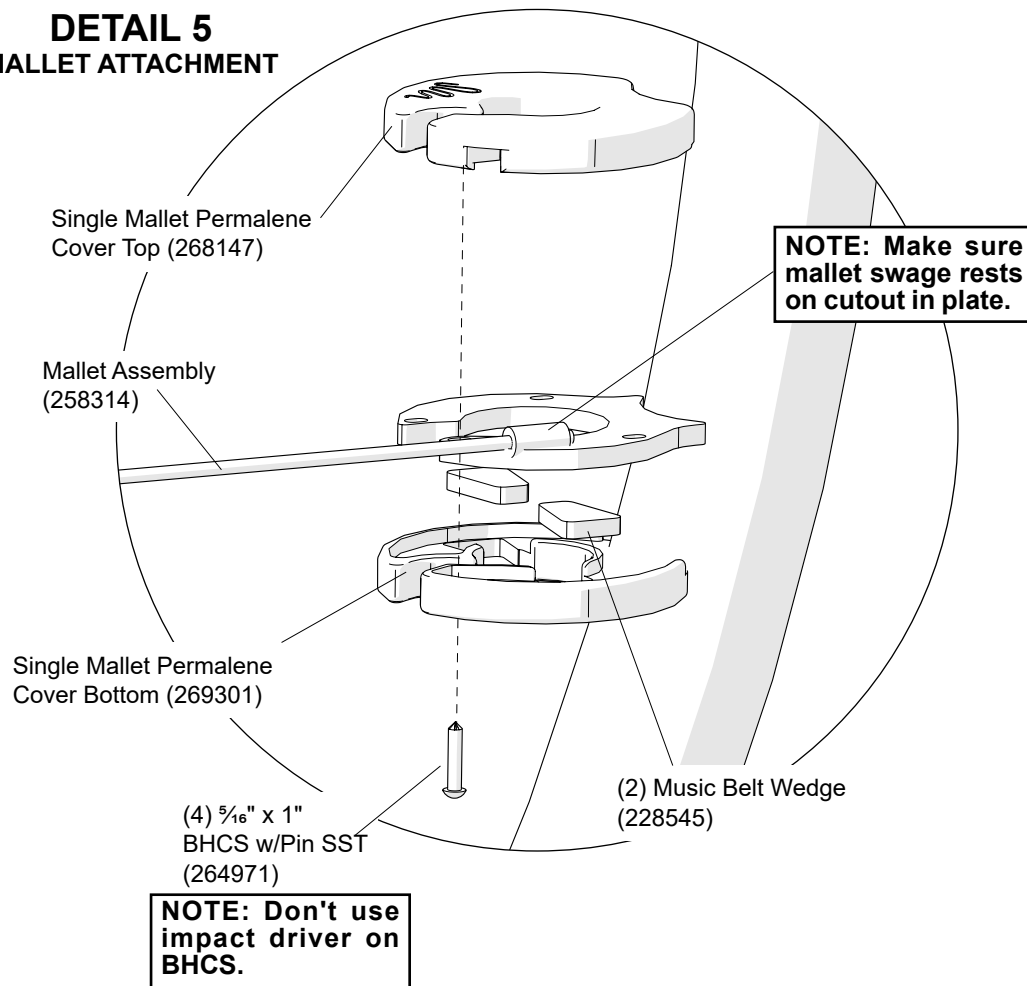


NOTE: If cable is loose, attach cable to lower hole on tab.

DETAIL 4 CHIME ATTACHMENT Direct bury



DETAIL 5 MALLET ATTACHMENT





Vibra Chimes™ Rhapsody®

Parts List - Vibra Chime 01

Part#	Description	Qty.
245508	Vibra Chime Tube Note Low C.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248379	Vibra Chime Tube Note Low C Cable.....	2
251274	Vibra Chime Frame DB 01, Specify Color.....	1
258314	Mallet Asm 55A Light Gray.....	1
248378	Vibra Chime Frame SM 01, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

Parts List - Vibra Chime 02

Part#	Description	Qty.
245509	Vibra Chime Tube Note D.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248380	Vibra Chime Tube Note D Cable.....	2
251273	Vibra Chime Frame DB 02, Specify Color.....	1
258314	Mallet Asm 55A Light Gray.....	1
248377	Vibra Chime Frame SM 02, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

Parts List - Vibra Chime 03

Part#	Description	Qty.
245510	Vibra Chime Tube Note E.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248381	Vibra Chime Tube Note E Cable.....	2
251272	Vibra Chime Frame DB 03, Specify Color.....	1
258314	Mallet Asm 55A Light Gray.....	1
248376	Vibra Chime Frame SM 03, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

Parts List - Vibra Chime 04

Part#	Description	Qty.
245511	Vibra Chime Tube Note F.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248382	Vibra Chime Tube Note F Cable.....	2
251271	Vibra Chime Frame DB 04, Specify Color.....	1
258314	Mallet Asm 55A Light Gray.....	1
248375	Vibra Chime Frame SM 04, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

Parts List - Vibra Chime 05

Part#	Description	Qty.
245512	Vibra Chime Tube Note G.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248374	Vibra Chime Frame SM 05, Specify Color.....	1
248383	Vibra Chime Tube Note G Cable.....	2
258314	Mallet ASM 55A Light Gray.....	1
251270	Vibra Chime Frame DB 05, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

Parts List - Vibra Chime 06

Part#	Description	Qty.
245513	Vibra Chime Tube Note A.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248373	Vibra Chime Frame SM 06, Specify Color.....	1
248384	Vibra Chime Tube Note A Cable.....	2
258314	Mallet ASM 55A Light Gray.....	1
251269	Vibra Chime Frame DB 06, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

Parts List - Vibra Chime 07

Part#	Description	Qty.
245514	Vibra Chime Tube Note B.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248372	Vibra Chime Frame SM 07, Specify Color.....	1
248385	Vibra Chime Tube Note B Cable.....	2
258314	Mallet Asm 55A Light Gray.....	1
251268	Vibra Chime Frame DB 07, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

Parts List - Vibra Chime 08

Part#	Description	Qty.
245516	Vibra Chime Tube Note C.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248386	Vibra Chime Tube Note C Cable.....	2
251267	Vibra Chime Frame DB 08, Specify Color.....	1
258314	Mallet Asm 55A Light Gray.....	1
248369	Vibra Chime Frame SM 08, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

DB= Direct Bury
SM= Surface Mount



Vibra™ Chimes

Rhapsody®

Specifications

Tube:	Comprised of 3.000" (76,2 mm) O.D. x (.125") (3,17 mm) wall aluminum tubing, and 1/2" (12,7 mm) diameter aluminum rod.
Frame:	Weldment comprised of 3.500" (88,9 mm) O.D. RS20 (.125") (3,17 mm) wall galvanized steel tubing, 1/4" stainless steel sheet and 3/8" (9,50 mm) thick HRPO steel sheet. Finish: ProShield®, color specified.
Mallet:	Comprised of 2" (50,8 mm) diameter light grey polyurethane, 1/2" (12,7 mm) diameter aluminum handle and 3/16" (4,74 mm) stainless steel cable with nylon coating.
Mallet Mount:	Permalene®, color specified.
Cables:	Comprised of 3/16" (4,74 mm) diameter stainless steel cable with nylon coating.
Music Hook:	Fabricated from 7 GA. (.188") (4,77 mm) stainless steel. Finish: TenderTuff coated. Gray in color.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	Approx. 1 person hours per chime.
Weight:	Chime 8 - DB 47 lbs. Chime 8 - SM 59 lbs. Chime 7 - DB 48 lbs. Chime 7 - SM 60 lbs. Chime 6 - DB 50 lbs. Chime 6 - SM 62 lbs. Chime 5 - DB 51 lbs. Chime 5 - SM 63 lbs. Chime 4 - DB 53 lbs. Chime 4 - SM 65 lbs. Chime 3 - DB 54 lbs. Chime 3 - SM 66 lbs. Chime 2 - DB 56 lbs. Chime 2 - SM 68 lbs. Chime 1 - DB 58 lbs. Chime 1 - SM 70 lbs.
Concrete:	5.24 Cubic Feet DB

Installation Instructions

- 1) **(Direct Bury)** Dig footing holes. Refer to the PlanView & Direct Bury Details.
 - 2) Attach cable to hooks. Refer to Detail 1.
 - 3) Attach hook to chime. Refer to Detail 2.
 - 4) Attach to Chime Frame on top and bottom. Refer to Detail 3, 4.
 - 5) Attach mallet to frame. Refer to Detail 5.
-
- 1) **(Surface Mount)** With sign in proper position, using 1/2" masonry bit and hammer drill, drill 3" deep holes into concrete slab through holes in post slate. Tap 1/2" x 2 3/4" expansion anchors into holes and secure using 1/2" standard hex nuts with 1/2" flat washers.
 - 2) Attach cable to hooks. Refer to Detail 1.
 - 3) Attach hook to chime. Refer to Detail 2.
 - 4) Attach to Chime Frame on top and bottom. Refer to Detail 3, 4.
 - 5) Attach mallet to frame. Refer to Detail 5.
 - 6) Install protective surfacing before users are allowed to play with component.

Parts List

Part#	Description	Qty.
130716	48" - 56" Double Wave Slide, Specify Color	1
131987	Hood, Specify Color.....	1
105327	5" Half Clamp, Specify Color	4
113729	Offset Hanger Clamp, Specify Color	4
100583	40 7/16" Aluminum Rail, Specify Color.....	1
113468	Spacer Tube, Specify Color.....	2
116908	64" Mid-Support (DB), Specify Color	1
116917	54" Mid-Support (DB), Specify Color	1
134565	28 1/2" Mid-Support, 48" Deck(SM),Specify Color	1
134567	18 1/2" Mid-Support, 48" Deck(SM),Specify Color	1
116920	36" Mid-Support, 56" Deck (SM), Specify Color.....	1
116921	26" Mid-Support, 56" Deck (SM), Specify Color.....	1
150941	Support (DB), Specify Color.....	2
151013	Support 48" Deck (SM), Specify Color.....	2
151003	Support 56" Deck (SM), Specify Color.....	2
132443	Rail Spacer, Specify Color	2
116943	Slide Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	4
100292	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread Bolt, SST.....	8
100362	3/8" Flat Washer, SST	12
100365	3/8" SAE Flat Washer, SST.....	8
111442	Rubber Bushing.....	8
106577	Hood Hardware Package	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	8
100200	3/8" x 3 1/2" BHCS w/Pin, SST	2
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100351	3/8" Tee Nut, SST.....	8
100362	3/8" Flat Washer, SST	2
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
121348	4 Hole (SM) Hardware Package	2
100266	1/2" x 2 3/4" Expansion Anchor	8
100322	1/2" Standard Hex Nut, SST	8
100363	1/2" Flat Washer, SST	8
DB = Direct Bury		
SM = Surface Mount		

Specifications

Slide:	Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.
Mid-Support:	Weldment comprised of 1.660" O.D. RS-20 (.085" - .095") galvanized steel tubing and 1/4" x 3" flat steel. Finish: ProShield®, color specified.
Support:	Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 3" mounting plate. Finish: ProShield, color specified.
Hood:	Rotationally molded from U.V. stabilized linear low-density polyethylene, color specified.
Rail:	Extruded from 1.125" O.D. x .312" W. 6005-T5 aluminum. Finish: ProShield, color specified.
Rail Spacer:	Fabricated from 1.3125 O.D. x 16 Ga. (.065) steel tubing. Finish: ProShield, color specified.
Spacer Tube:	Made from 6061-T6 aluminum 7/8" O.D. x 1 11/16". Finish: ProShield, color specified.

Specifications are subject to change without notice.

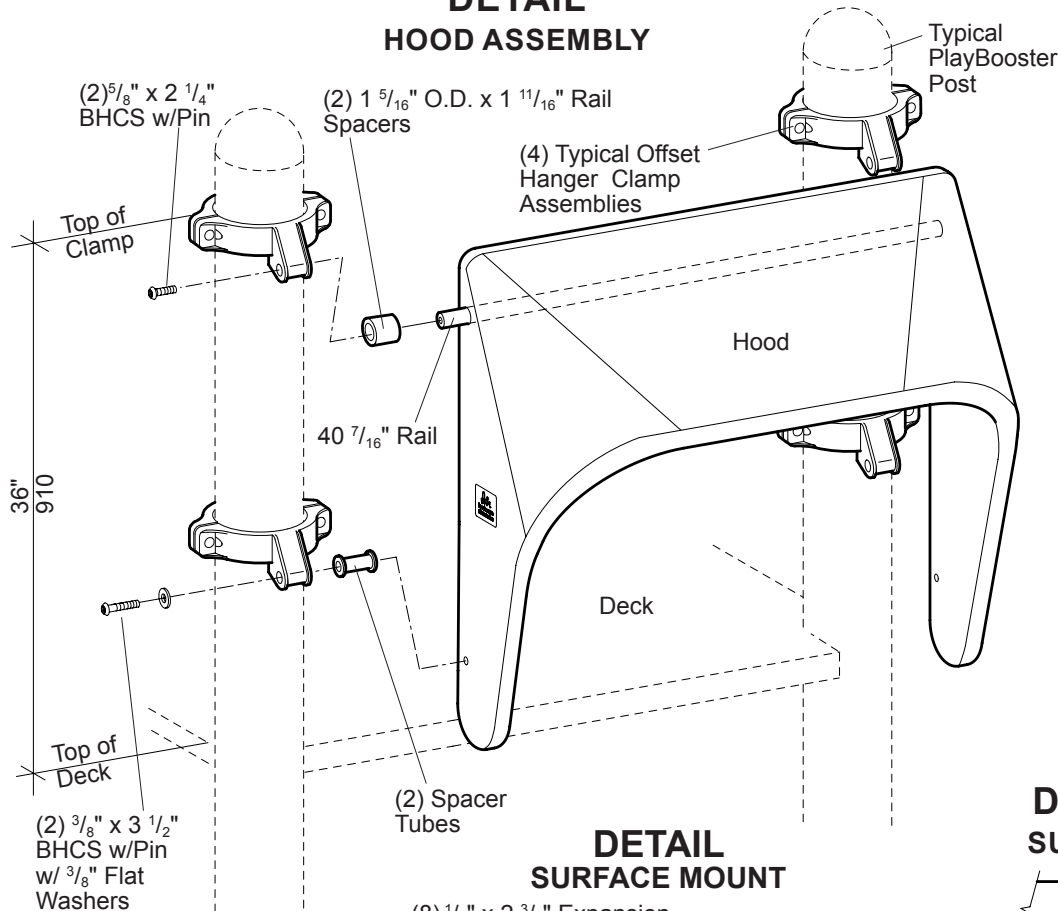
Offset Hanger	
Clamp Assembly:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	(DB) - 3 man hours (SM) - 2 man hours
Concrete Req.:	Approx. 5.2 cu. ft.
Area Req.:	6' (1.82 m) minimum use zone at exit.
Weight:	(DB) - 174 lbs. (SM) - 158 lbs.
Fall Height:	Deck Height

Installation Instructions

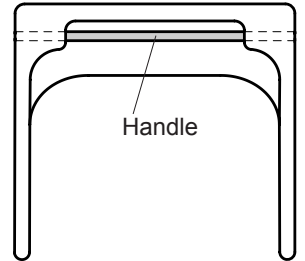
- (Direct Bury)** Dig footings spaced as shown. Refer to the Key for the exit support and mid-support depths of bury.
- Insert 40 7/16" rail through top of hood, place rail spacer tube on each end of the 40 7/16" rail and attach to posts at height shown using offset hanger clamp assemblies. Refer to the Typical Offset Hanger Clamp Spec Sheet. Fasten bottom of hood using 3/8" x 3 1/2" BHCS w/Pin with 3/8" flat washers through clamps, spacer tubes and into threaded inserts in hood. Refer to the Hood Assembly Detail.
- Attach mid-supports and exit supports to slide using 3/8" x 1 1/4" BHCS w/Pin limited thread bolts, 3/8" SAE flat washers, rubber bushings and 3/8" flat washers. Refer to the Support Detail and the Mid-Support Detail. **NOTE: Attach bolts in the center of the slots to allow for expansion and contraction. Snug bolts down only, do not over-tighten!**
- Attach slide to the face of the deck using 3/8" x 7/8" BHCS w/Pin with 3/8" flat washers. Refer to the Deck Connection Detail.
- Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Offset Hanger Clamp Spec Sheet.
- (Direct Bury)** With supports plumb pour concrete footings. Allow concrete footings to cure for a minimum of 72 hours before users are allowed to play on the structure.

(Surface Mount) Mark anchor bolt locations on concrete slab through holes in anchor plates and remove wave slide. Drill 1/2" x 3" deep holes on marks into concrete using a hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Reposition wave slide and reattach to the face of the deck following step 4. Fasten supports to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.
- Install protective surfacing before users are allowed to play on the structure.

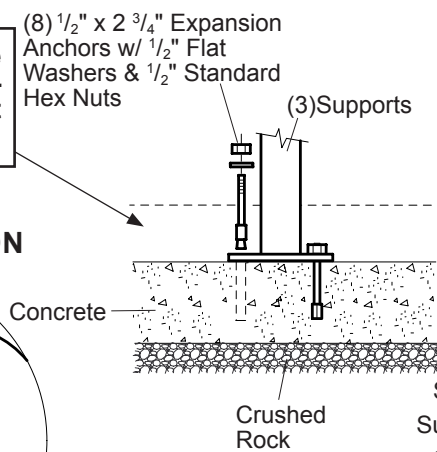
**DETAIL
HOOD ASSEMBLY**



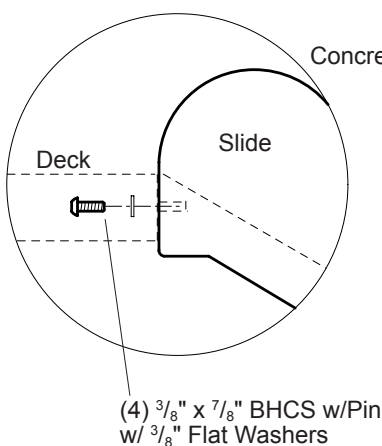
HOOD - HANDLE DETAIL



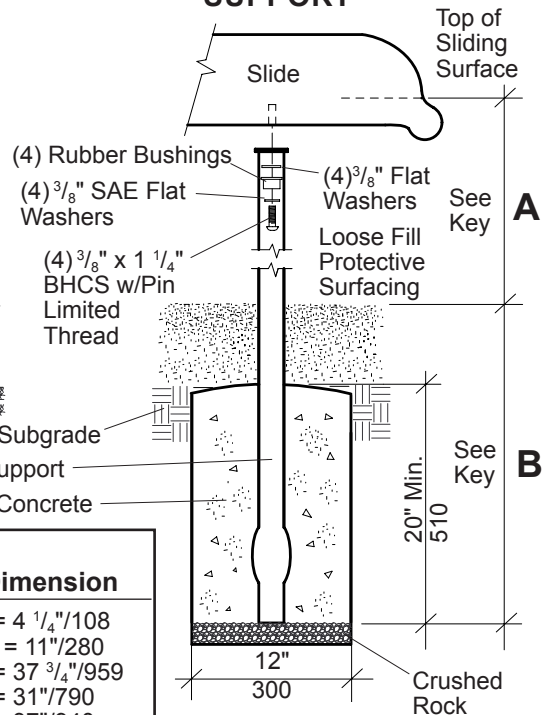
**DETAIL
SURFACE MOUNT**



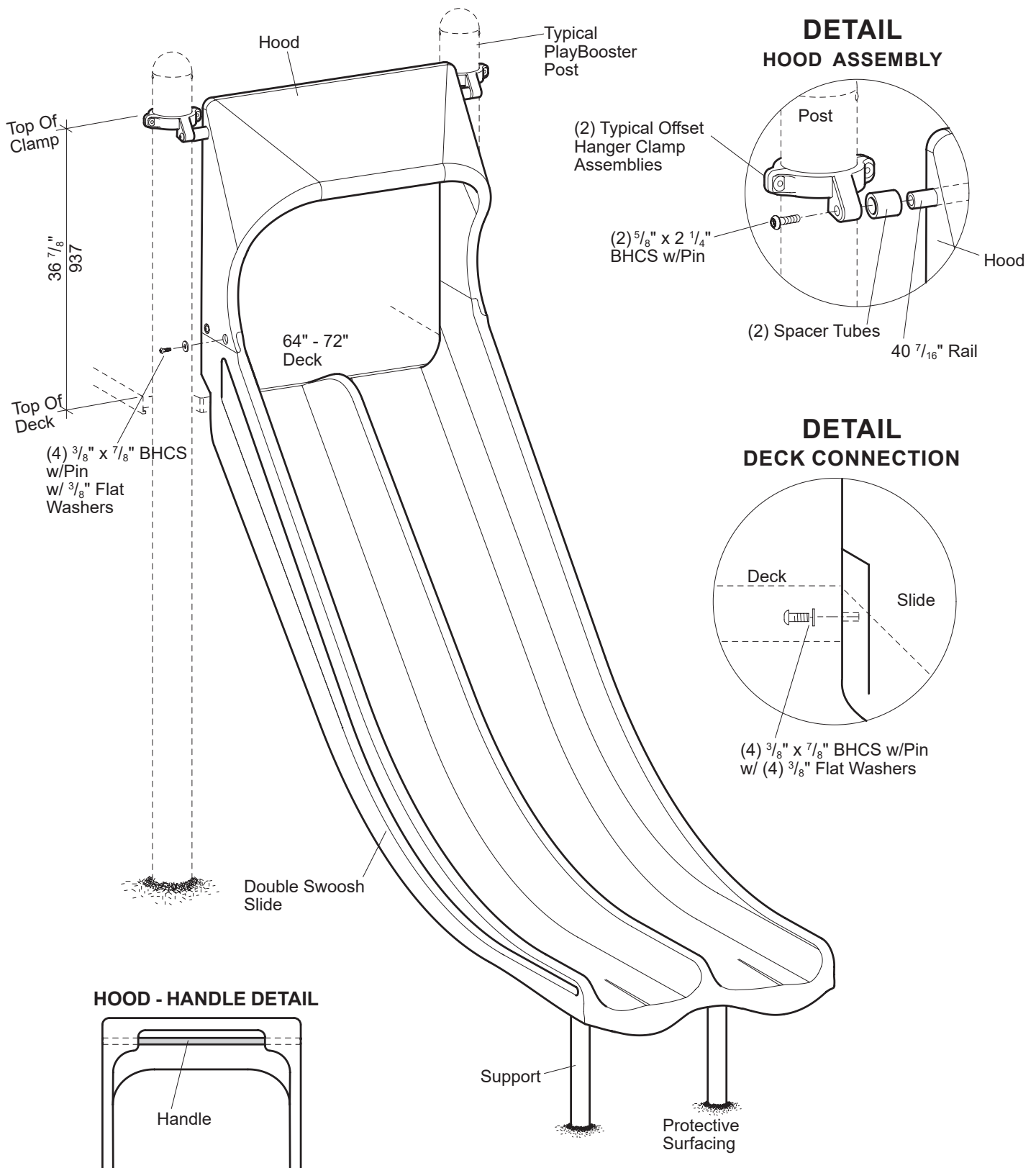
**DETAIL
DECK CONNECTION**



**DETAIL
SUPPORT**



KEY: Deck Hgt.	Dimension
48"	A = 4 1/4"/108
56"	A = 11"/280
48"	B = 37 3/4"/959
56"	B = 31"/790
48"	C = 37"/940
56"	C = 30"/760



PlayBooster® 130390 Double Swoosh™ Slide, 64"-72"

Sheet 1 of 2

Parts List

Part#	Description	Qty.
128823	Double Swoosh Slide, 64"/72", Specify Color.....	1
128777	Slide Hood, Specify Color.....	1
100583	40 7/16" Aluminum Rail, Specify Color.....	1
132443	Spacer Tube, Specify Color.....	2
105327	5" Half Clamp, Specify Color.....	2
113729	Offset Hanger Clamp, Specify Color.....	2
100610	1/4" x 5/8" Drive Rivet AL/SST.....	2
150941	Support (DB), Specify Color.....	2
151021	Support 64" Deck (SM), Specify Color.....	2
151022	Support 72" Deck (SM), Specify Color.....	2
264735	Double Swoosh Slide Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	8
100203	5/8" x 2 1/4" BHCS w/Pin, SST	2
100292	3/8" x 1 1/4" BHCS w/Pin Ltd. Thread Bolt, SST.....	4
100351	3/8" Tee Nut, SST.....	4
100362	3/8" Flat Washer, SST	16
111442	Rubber Bushing.....	4
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
121348	4 Hole (SM) Hardware Package	1
100266	1/2" x 2 3/4" Expansion Anchor.....	4
100322	1/2" Standard Hex Nut, SST	4
100363	1/2" Flat Washer, SST	4

DB = Direct Bury

SM = Surface Mount

Specifications

Slide:	Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
Spacer Tube:	Fabricated from 1.3125 O.D. x 16 Ga. (.065) steel tubing. Finish: ProShield®, color specified.
Hood:	Rotationally molded from U.V. stabilized linear low density polyethylene, color specified.
Rail:	Extruded from 1.125" O.D. x .312" W. 6005-T5 aluminum. Finish: ProShield, color specified.
Support:	Weldment comprised of 2.375" O.D. RS-20 (.095" - .105") galvanized steel tubing and 1/4" x 3" mounting plate. Finish: ProShield, color specified.
Offset Hanger Clamp Assembly:	Cast aluminum. Finish: ProShield, color specified.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	SM - Approx. 2 man hours DB - Approx. 3 man hours
Concrete Req.:	Approx. 2.6 cu. ft.
Area Req.:	6' (1,83 m) minimum use zone at exit
Weight:	179 lbs.
Fall Height:	64" (1,63 m) Deck Height 6' (1,83 m) Deck Height

Installation Instructions

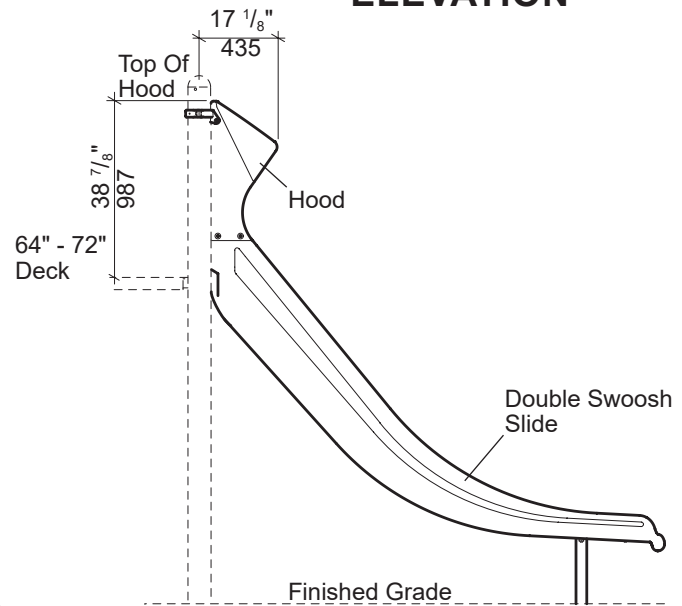
Direct Bury

- 1) Dig footings spaced as shown.
- 2) Attach the supports to the slide using 3/8" x 1 1/4" BHCS w/Pin limited thread bolts, 3/8" flat washers, rubber bushings and 3/8" flat washers. Refer to the Support Attachment Detail.
- 3) Attach the slide to the face of the deck using 3/8" x 7/8" BHCS w/Pin with 3/8" flat washers. Refer to the Deck Connection Detail.
- 4) Attach the slide hood to the slide using 3/8" x 7/8" BHCS w/Pin with 3/8" flat washers.
- 5) Insert 40 7/16" rail through top of hood, place spacer tubes over each end of the 40 7/16" rail and attach to posts at height shown using offset hanger clamp assemblies. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 6) Prop the end of the slide according to the proper deck height. With support plumb pour concrete footings. Allow concrete footing to cure for a minimum of 72 hours before users are allowed to play on the structure.
- 7) Install protective surfacing before users are allowed to play on the structure.

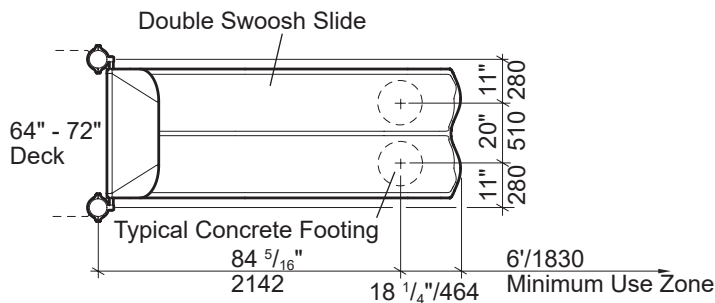
Surface Mount

- 1) Attach the supports to the slide using 3/8" x 1 1/4" BHCS w/Pin limited thread bolts, 3/8" flat washers, rubber bushings and 3/8" flat washers. Refer to the Support Detail.
- 2) Attach the slide to the face of the deck using 3/8" x 7/8" BHCS w/Pin with 3/8" flat washers. Refer to the Deck Connection Detail.
- 3) Mark anchor bolt locations on concrete slab through holes in anchor plates and disconnect slide from the face of the deck. Drill 1/2" x 3" deep holes on marks into concrete using a hammer drill and 1/2" masonry bit. Tap expansion anchors into drilled holes. Reposition slide and reattach to the face of the deck following step 2. Fasten support to expansion anchors using 1/2" standard hex nuts with 1/2" flat washers.
- 4) Attach the slide hood to the slide using 3/8" x 7/8" BHCS w/Pin with 3/8" flat washers.
- 5) Insert 40 7/16" rail through top of hood, place spacer tubes over each end of the 40 7/16" rail and attach to posts at height shown using offset hanger clamp assemblies. Refer to the Typical Offset Hanger Clamp Spec Sheet.
- 6) Install protective surfacing before users are allowed to play on the structure.

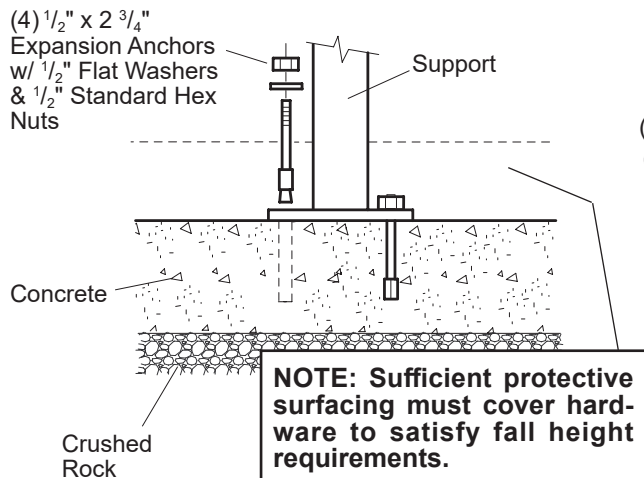
ELEVATION



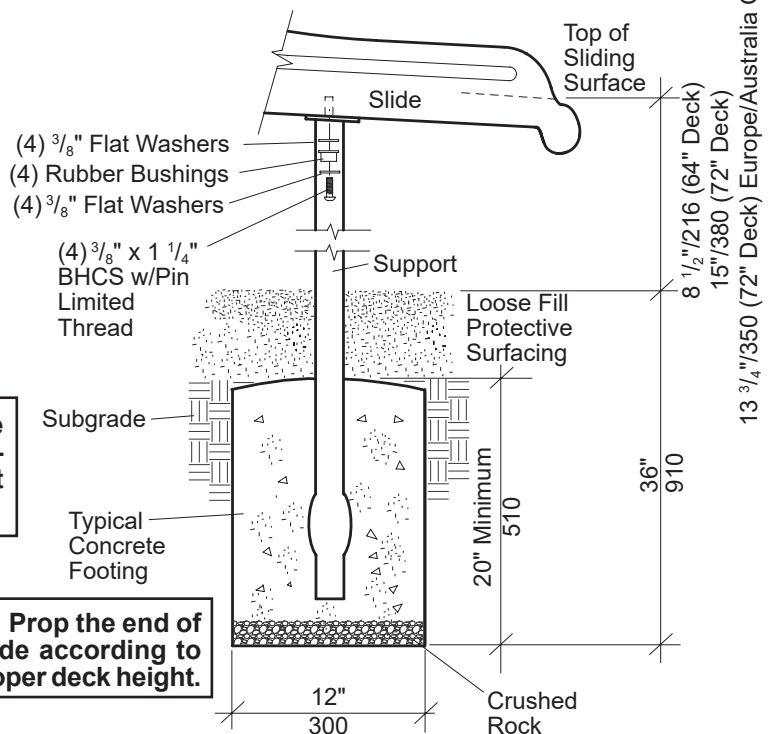
PLAN VIEW/FOOTING LAYOUT



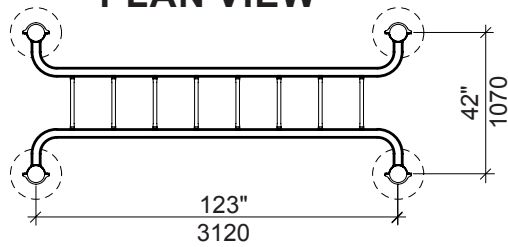
DETAIL SURFACE MOUNT



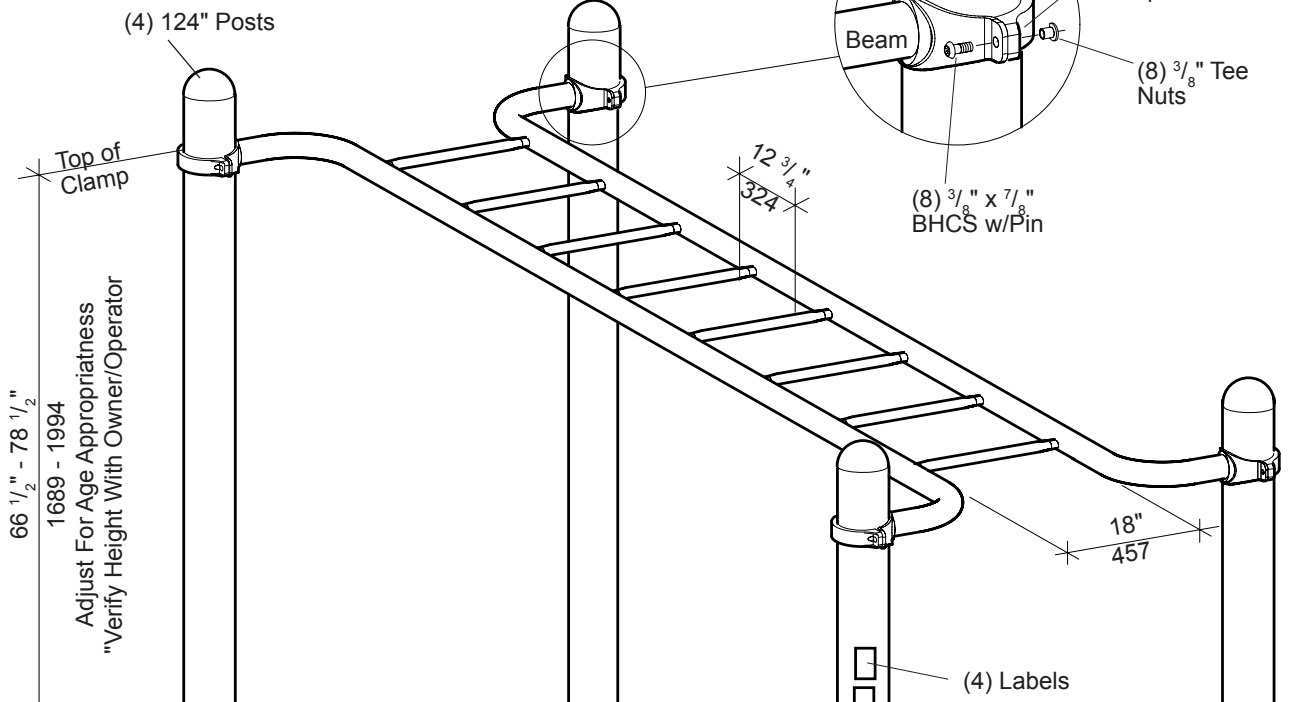
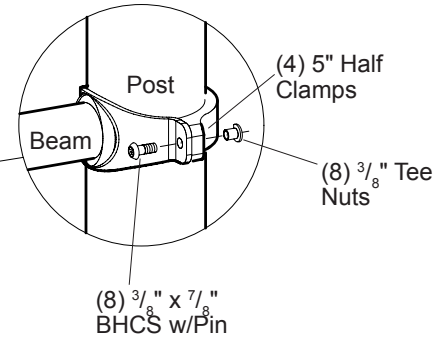
DETAIL SUPPORT ATTACHMENT



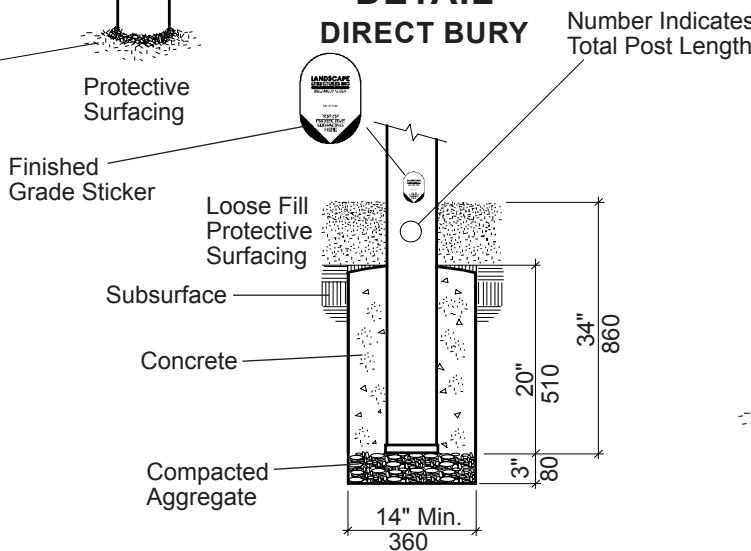
PLAN VIEW



**DETAIL
BEAM ATTACHMENT**



**DETAIL
DIRECT BURY**



Sports & Fitness

137962 Horizontal Ladder

Part#	Description	Qty.
145931	Horizontal Ladder, Specify Color	1
105327	5" Half Clamp, Specify Color	4
107525	Steel 124" Post (DB), Specify Color	4
107700	Aluminum 124" Post (DB), Specify Color	4
100610	1/4" x 5/8" Drive Rivet, AL/SST	4
182693	Labels 5-12YRS. Hardware Package	1
115176	Hard Surface Warning Label ASTM	1
156847	Play Safe Label 5-12 YRS.	1
182212	Entanglement Warning	1
182213	Hot Surface Warning Label	1
149233	Horizontal Ladder, Hardware Package	1
100196	3/8" x 7/8" BHCS w/Pin, SST	8
100351	3/8" Tee Nut, SST	8

DB = Direct Bury

Specifications

Post: See PlayBooster® (PB) General Specifications.

Horizontal Ladder: Weldment comprised of 2.375" O.D. RS-40 (.130"-.140") galvanized steel tubing, 1.315 O.D. RS-20 (.080"-.090") galvanized steel tubing and 1/4" HRPO flat steel. Finish: ProShield, color specified.

Half Clamp: Cast aluminum. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: DB - Approx. 4 man hours

Concrete Req.: Approx. 7.5 cu. ft.

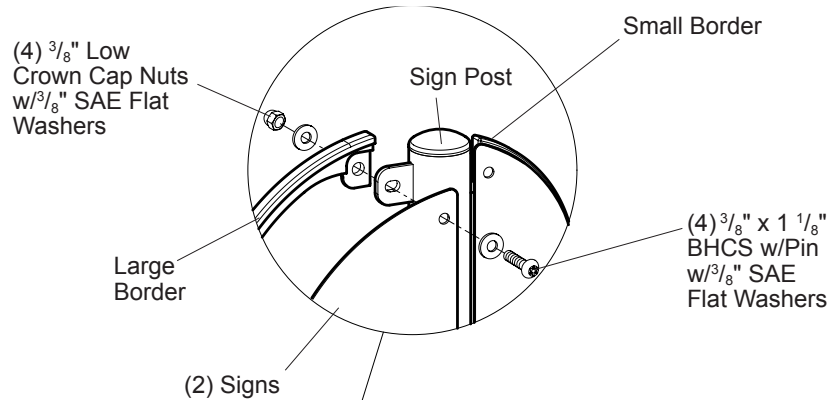
Weight: 213 lbs. Aluminum
378 lbs. Steel

Fall Height: 67" - 79" (1,70 m - 2,00 m)

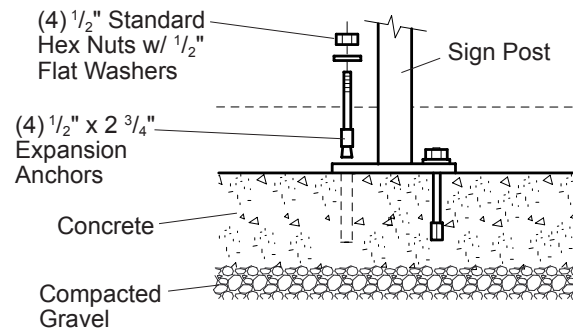
Installation Instructions

- 1) Dig footing holes spaced as shown.
- 2) Mark posts for the appropriate height of the ladder you are installing.
- 3) Lift ladder into position and attach to posts using 5" half clamps with 3/8" x 7/8" BHCS w/pin and 3/8" tee nuts.
- 4) Be sure ladder is level, if not, adjust clamps to do so.
- 5) With posts plumb and ladder level, pour concrete footings. Allow concrete footings to cure a minimum of 72 hours before users are allowed to play on the structure.
- 6) Apply Labels, as shown.
- 7) Install 1/4" x 5/8" drive rivets in all 5" half clamps. Refer to the Typical Hanger Clamp Detail.
- 8) Install protective surfacing before users are allowed to play on the structure.

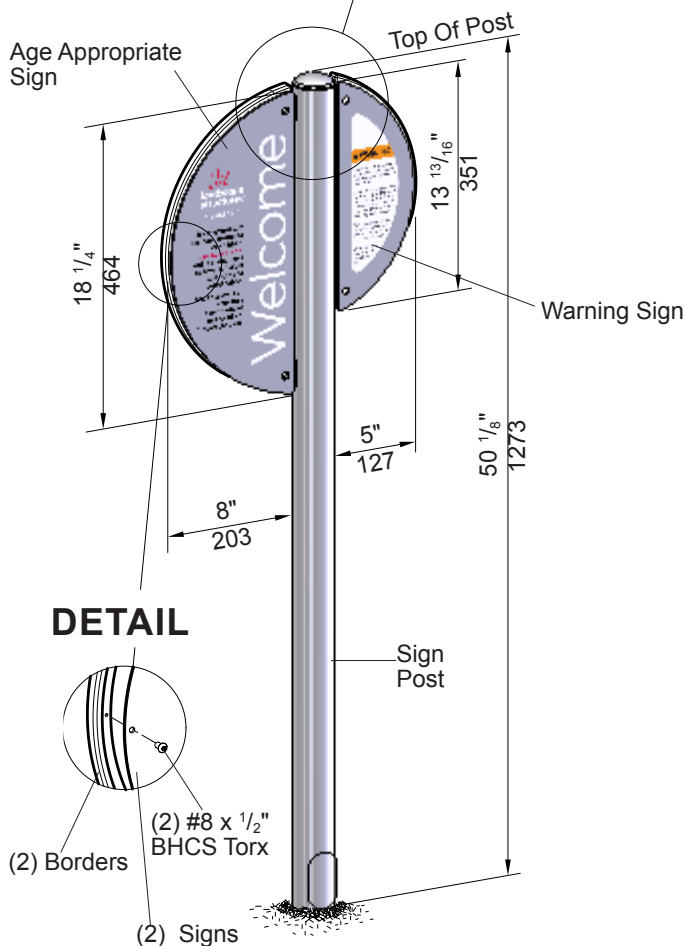
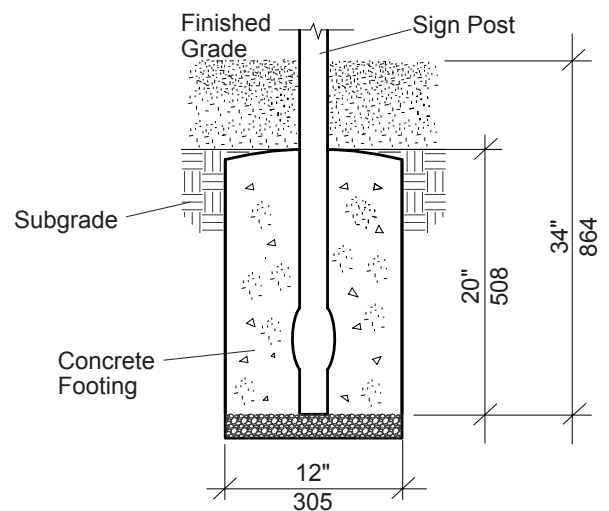
DETAIL SIGN ATTACHMENT



DETAIL SURFACE MOUNT



DETAIL DIRECT BURY FOOTING



Model 182503 - Landscape Structures Provided Welcome Sign
Model 182504 - Welcome Sign

Signs

Welcome Sign

Parts List

Part#	Description	Qty.
219911	Warning Sign, Gray	1
219912	Age Appropriate Sign, 2-12 Years, Gray	*
219913	Age Appropriate Sign, 2-5 Years, Gray	*
219914	Age Appropriate Sign, 5-12 Years, Gray	*
219915	Age Appropriate Sign, 1 1/2-5 Years, Gray	*
219916	Age Appropriate Sign, 1 1/2-12 Years, Gray	*
219918	Age Appropriate Sign, 6-23 Months, Gray	*
180598	Sign Post (DB), Specify Color	*
181119	Sign Post (SM), Specify Color	*
193782	Large Border, Black	1
193783	Small Border, Black	1
213258	Age/Warning Sign Hardware Package	1
100198	3/8" x 1 1/8" BHCS w/Pin, SST	4
100349	3/8" Low Crown Cap Nut, SST	4
100365	3/8" SAE Flat Washer, SST	8
168323	#8 x 1/2" BHCS Torx, SST	2
169413	1/4-6 Lobe T-15 Tamp. Bit	1
121348	4 Hole (SM) Hardware Package	1
100266	1/2" x 2 3/4" Expansion Anchor	4
100322	1/2" Standard Hex Nut, SST	4
100363	1/2" Flat Washer, SST	4

DB = Direct Bury

SM = Surface Mount

* = Quantity Determined By Your Order

Specifications

Sign Panel: Panel is fabricated from 1/8" (.125")(3,17 mm) aluminum plate. Finish: ProShield®, gray in color. **(Sign)** Digital image is transferred to a 1/8" (.125")(3,17 mm) ProShield coated aluminum plate, then infused into the ProShield.

Border: Permalene, black in color.

Post: Weldment comprised 2.375" (60,33 mm) O.D. RS20 (.095-.105) (2,41 mm-2,67 mm) wall galvanized tube, 1/4" (6,35 mm) HRPO steel sheet and aluminum post cap. Finish: ProShield, color specified.

Fasteners: Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).

Installation Time: **(DB)** Approx. 1 man hour
(SM) Approx. 1/2 man hour

Concrete Req: Approx. 1.31 cu. ft.

Weight: **(DB)** - 24 lbs.
(SM) - 27 lbs.

Installation Instructions

Direct Bury

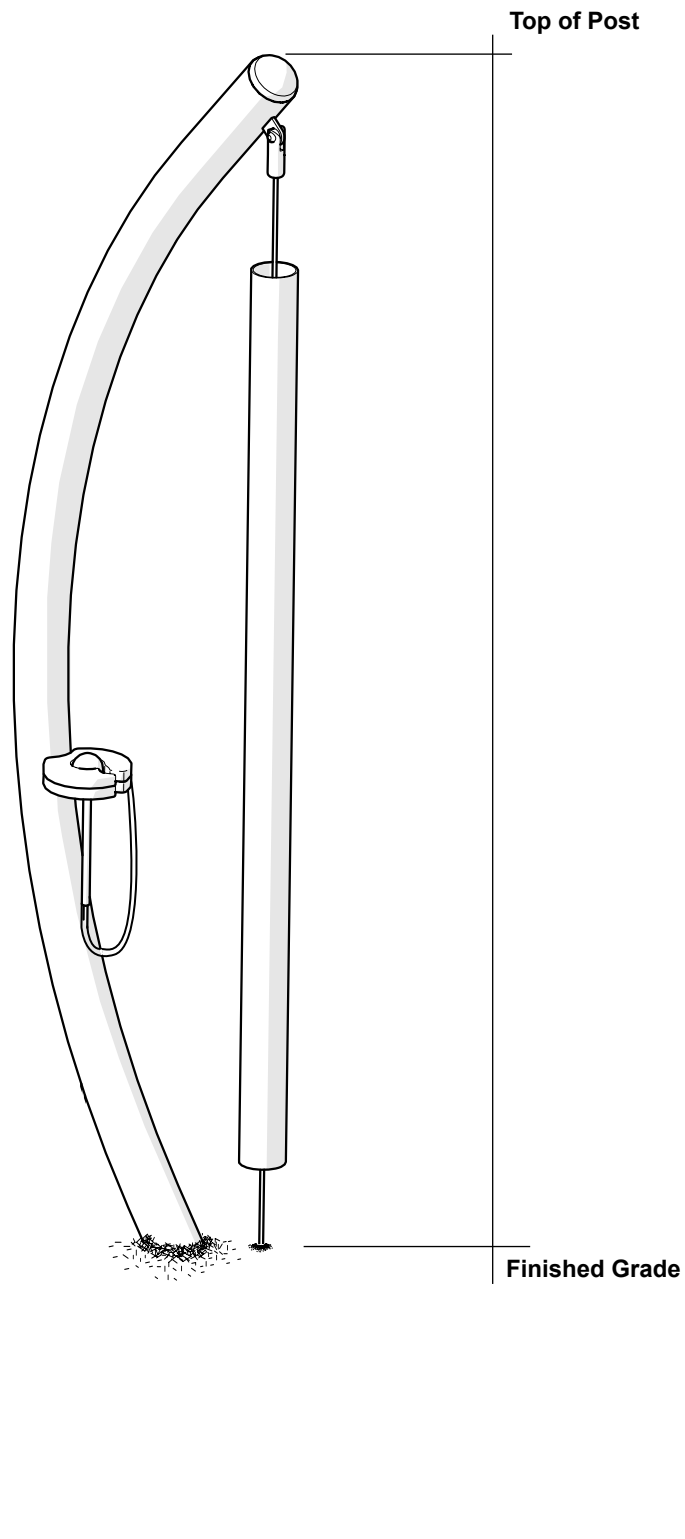
- 1) Dig footing hole to depth and diameter shown.
- 2) Attach sign panels and borders to post as shown, using 3/8" x 1 1/8" BHCS with 3/8" SAE flat washers and 3/8" low crown cap nuts with 3/8" SAE flat washers. Attach signs to borders using #8 x 1/2" BHCS Torx.
- 3) Set sign assembly in footing hole and temporarily brace in plumb position.
- 4) Pour concrete footing. After concrete has cured, remove bracing.

Surface Mount

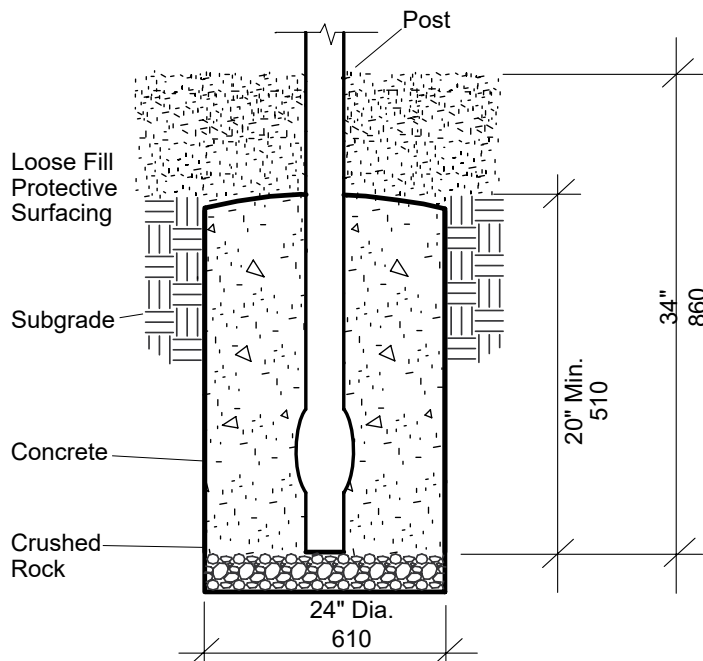
- 1) Attach sign panels and borders to post as shown, using 3/8" x 1 1/8" BHCS with 3/8" SAE flat washers and 3/8" low crown cap nuts with 3/8" SAE flat washers. Attach signs to borders using #8 x 1/2" BHCS Torx.
- 2) With sign in proper position, using a 1/2" masonry bit and hammer drill, drill 3" deep holes into concrete slab through holes in post plate. Tap 1/2" x 2 3/4" expansion anchors into holes and secure using 1/2" standard hex nuts with 1/2" flat washers.

SAFETY NOTE

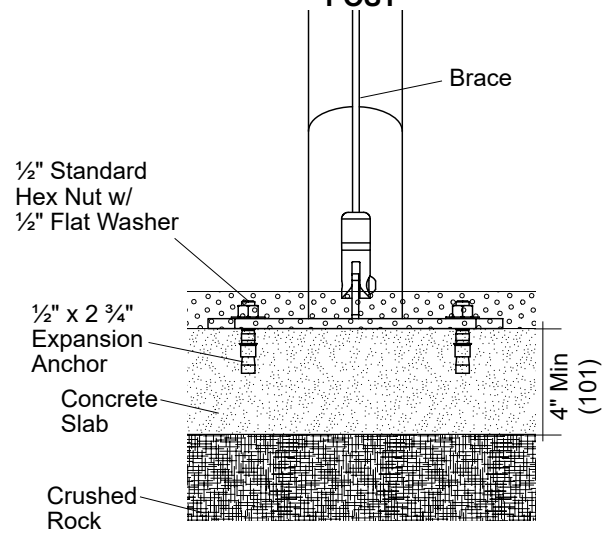
Choose a protective surfacing material that has a Critical Height Value of at least the height of the Highest Accessible Part/Fall Height of the adjacent equipment. (Ref. ASTM F1487.)



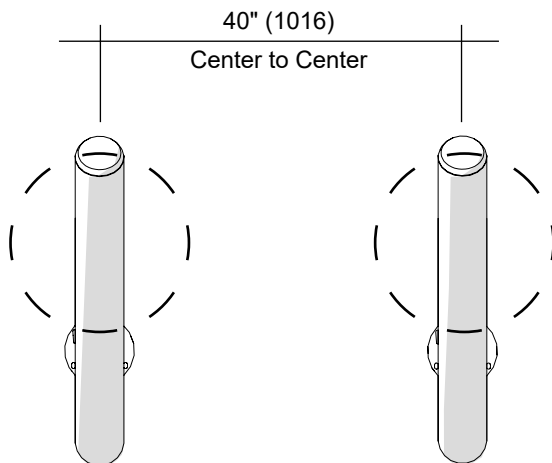
DETAIL DIRECT BURY



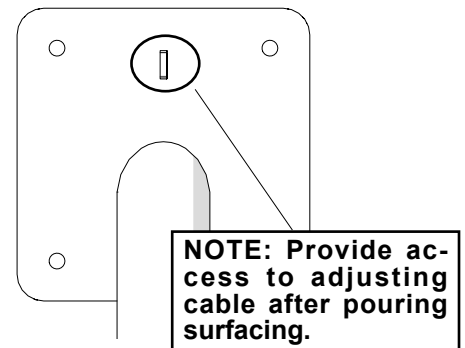
DETAIL SURFACE MOUNT POST



DETAIL Plan View

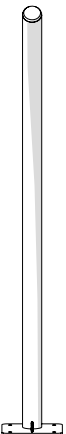
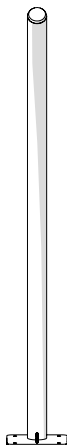
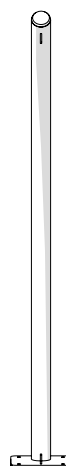
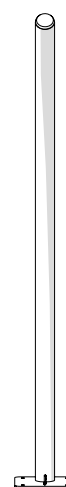
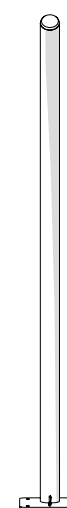

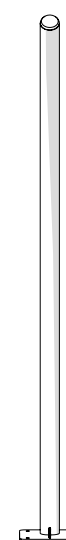



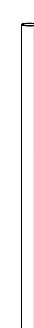



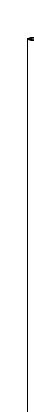











DETAIL SURFACE MOUNT

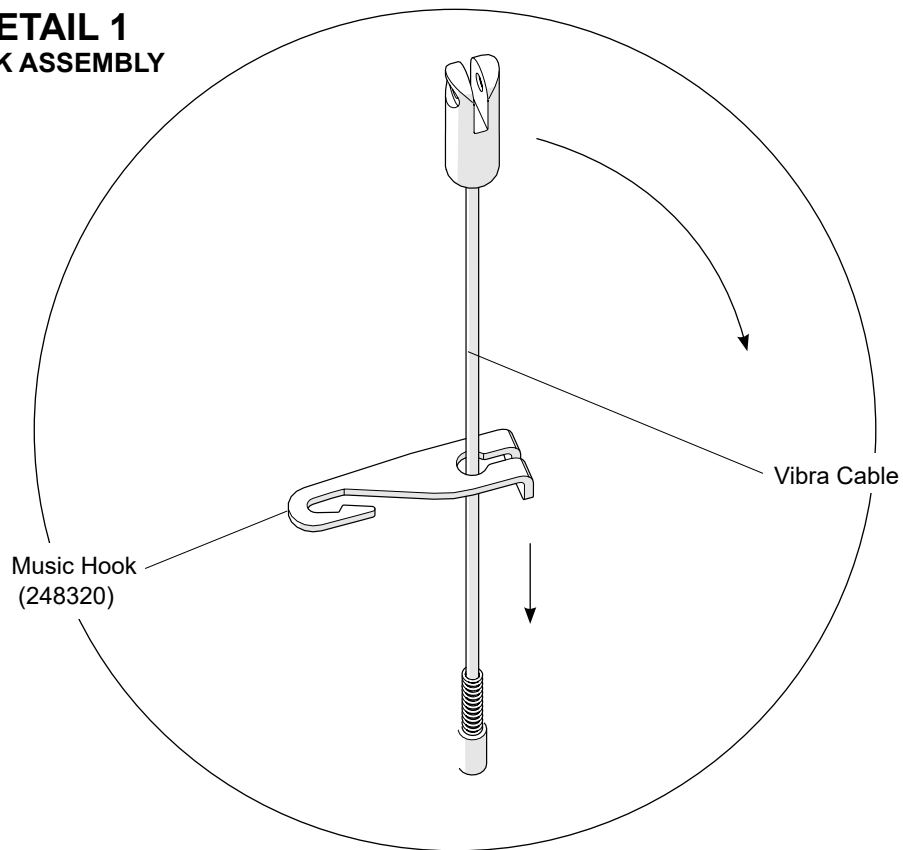


DETAIL

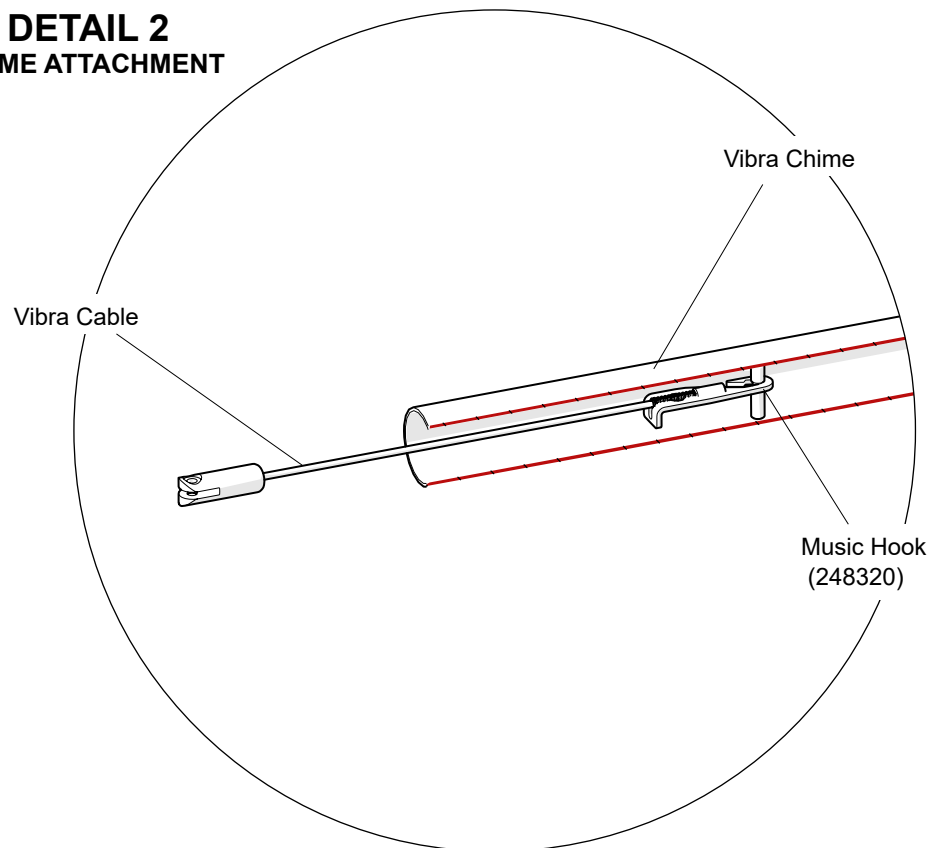
Vibra® Chime Assembly Pairings

	Vibra® Chime 8	Vibra® Chime 7	Vibra® Chime 6	Vibra® Chime 5	Vibra® Chime 4	Vibra® Chime 3	Vibra® Chime 2	Vibra® Chime 1
								
	DB 251267 SM 248369 78" (1982)	DB 251268 SM 248372 80" (2032)	DB 251269 SM 248373 83" (2108)	DB 251270 SM 248374 86.5" (2197)	DB 251271 SM 248375 90" (2286)	DB 251272 SM 248376 92" (2336)	DB 251273 SM 248377 96" (2438)	DB 251274 SM 248378 100.25" (2546)
Vibra Frames								
								
	245516 52.5" (1320)	245514 54" (1371)	245513 57" (1447)	245512 60.5" (1536)	245511 64" (1625)	245510 66" (1676)	245509 70" (1778)	245508 74" (1879)
Vibra Notes								
								
	248386 (2) 18 3/4" (476)	248385 (2) 19 1/4" (489)	248384 (2) 20" (508)	248383 (2) 20 3/4" (527)	248382 (2) 21 1/2" (546)	248381 (2) 22" (558)	248380 (2) 22 7/8" (581)	248379 (2) 23 3/4" (603)
Vibra Cables								

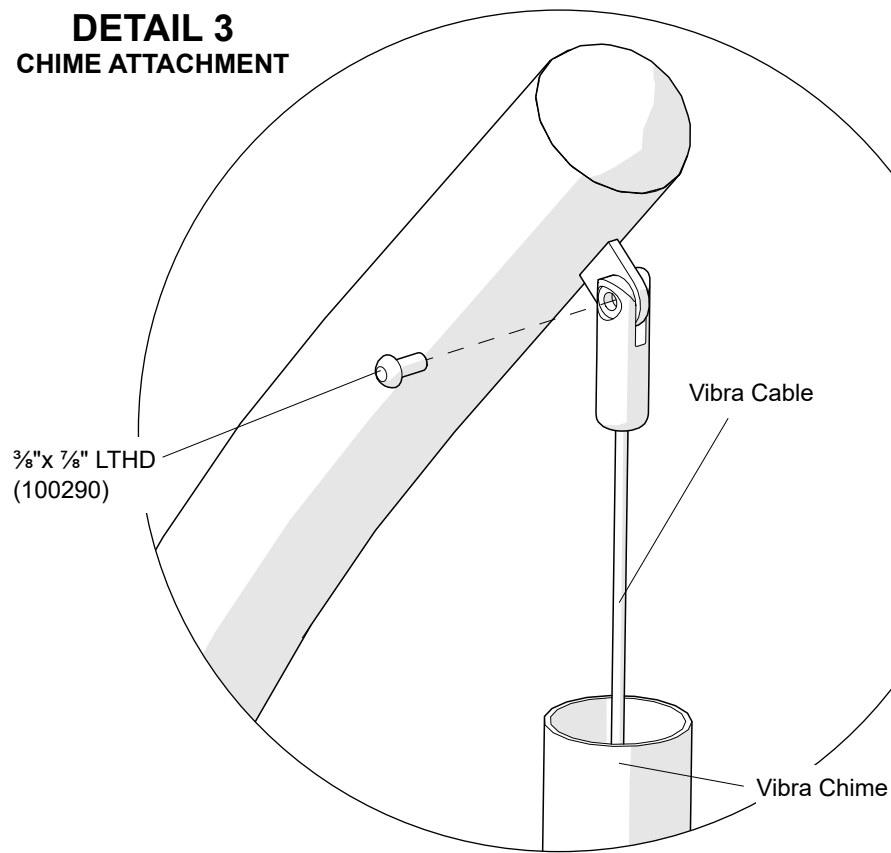
DETAIL 1 **HOOK ASSEMBLY**



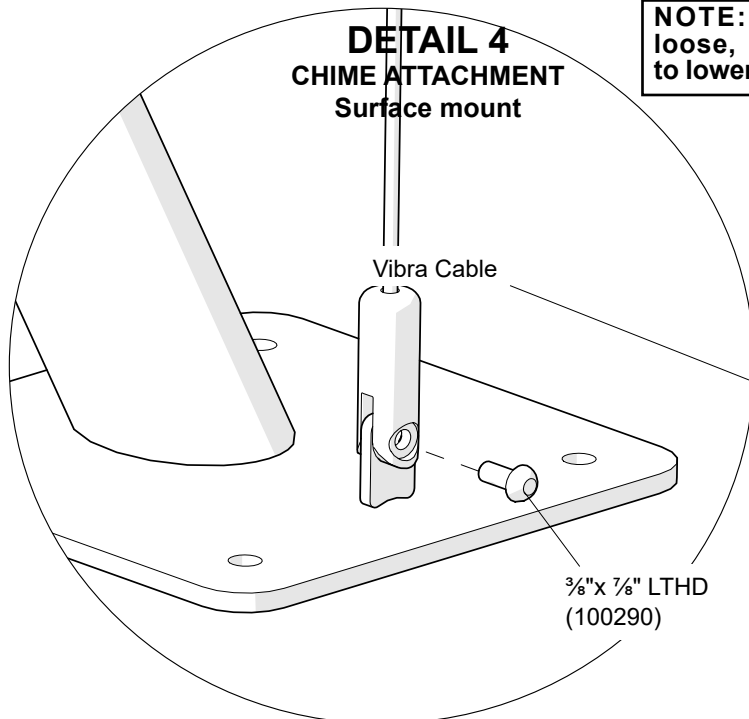
DETAIL 2 **CHIME ATTACHMENT**



DETAIL 3 CHIME ATTACHMENT

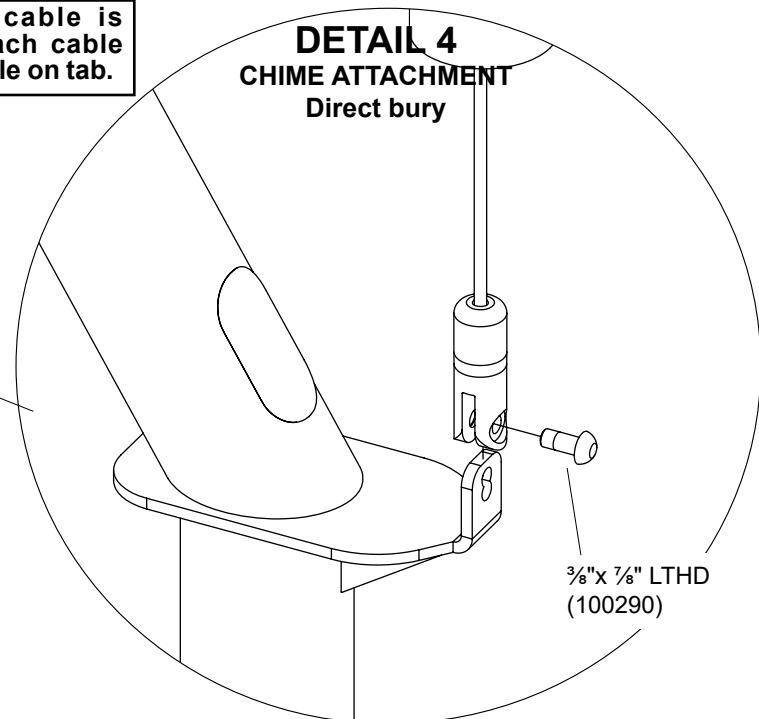


DETAIL 4 CHIME ATTACHMENT Surface mount

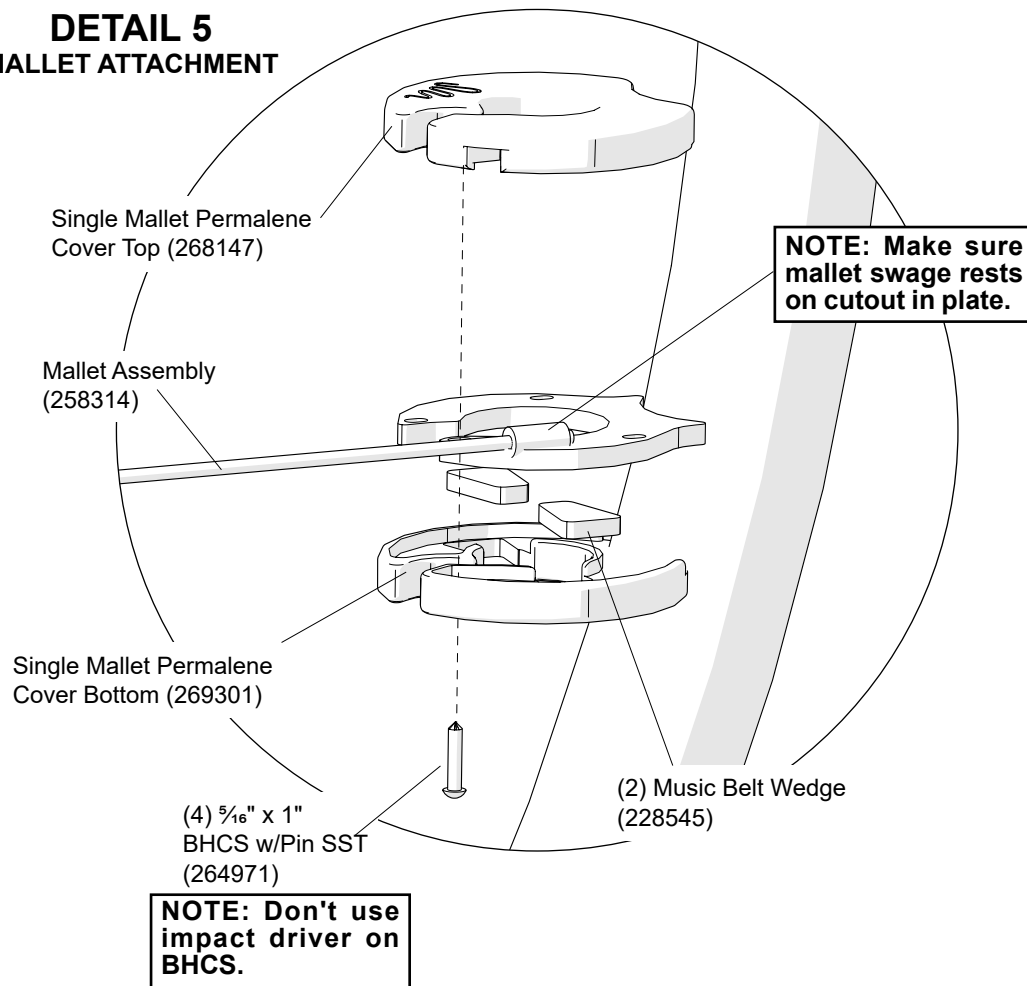


NOTE: If cable is loose, attach cable to lower hole on tab.

DETAIL 4 CHIME ATTACHMENT Direct bury



DETAIL 5 MALLET ATTACHMENT





Vibra Chimes™ Rhapsody®

Parts List - Vibra Chime 01

Part#	Description	Qty.
245508	Vibra Chime Tube Note Low C.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248379	Vibra Chime Tube Note Low C Cable.....	2
251274	Vibra Chime Frame DB 01, Specify Color.....	1
258314	Mallet Asm 55A Light Gray.....	1
248378	Vibra Chime Frame SM 01, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

Parts List - Vibra Chime 02

Part#	Description	Qty.
245509	Vibra Chime Tube Note D.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248380	Vibra Chime Tube Note D Cable.....	2
251273	Vibra Chime Frame DB 02, Specify Color.....	1
258314	Mallet Asm 55A Light Gray.....	1
248377	Vibra Chime Frame SM 02, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

Parts List - Vibra Chime 03

Part#	Description	Qty.
245510	Vibra Chime Tube Note E.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248381	Vibra Chime Tube Note E Cable.....	2
251272	Vibra Chime Frame DB 03, Specify Color.....	1
258314	Mallet Asm 55A Light Gray.....	1
248376	Vibra Chime Frame SM 03, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

Parts List - Vibra Chime 04

Part#	Description	Qty.
245511	Vibra Chime Tube Note F.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248382	Vibra Chime Tube Note F Cable.....	2
251271	Vibra Chime Frame DB 04, Specify Color.....	1
258314	Mallet Asm 55A Light Gray.....	1
248375	Vibra Chime Frame SM 04, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

Parts List - Vibra Chime 05

Part#	Description	Qty.
245512	Vibra Chime Tube Note G.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248374	Vibra Chime Frame SM 05, Specify Color.....	1
248383	Vibra Chime Tube Note G Cable.....	2
258314	Mallet ASM 55A Light Gray.....	1
251270	Vibra Chime Frame DB 05, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

Parts List - Vibra Chime 06

Part#	Description	Qty.
245513	Vibra Chime Tube Note A.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248373	Vibra Chime Frame SM 06, Specify Color.....	1
248384	Vibra Chime Tube Note A Cable.....	2
258314	Mallet ASM 55A Light Gray.....	1
251269	Vibra Chime Frame DB 06, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

Parts List - Vibra Chime 07

Part#	Description	Qty.
245514	Vibra Chime Tube Note B.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248372	Vibra Chime Frame SM 07, Specify Color.....	1
248385	Vibra Chime Tube Note B Cable.....	2
258314	Mallet Asm 55A Light Gray.....	1
251268	Vibra Chime Frame DB 07, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

Parts List - Vibra Chime 08

Part#	Description	Qty.
245516	Vibra Chime Tube Note C.....	1
268147	Single Mallet Perm Cover Top, Specify Color.....	1
269301	Single Mallet Perm Cover Bottom, Specify Color.....	1
248386	Vibra Chime Tube Note C Cable.....	2
251267	Vibra Chime Frame DB 08, Specify Color.....	1
258314	Mallet Asm 55A Light Gray.....	1
248369	Vibra Chime Frame SM 08, Specify Color.....	1
268171	Hdw Pkg Vibra™ Chime.....	1
100290	BHCS 6LP LTHD 3/8" x 7/8", SST.....	2
264971	BHCS 6LP 3/16" x 1", SST.....	4
248320	Music Hook Dipped, Grey.....	2
228545	Music Belt Wedge.....	2
127463	Bit Hex TPP T27 (Torx).....	1
121348	Hdw Pkg 4-Hole SM 1/2-13.....	1
100266	Exp Anchor 1/2" x 2-3/4" ZP.....	4
100322	Nut Hex STD 1/2-13, SST.....	4
100363	Washer Flat 1/2", SST.....	4

DB= Direct Bury
SM= Surface Mount



Vibra™ Chimes

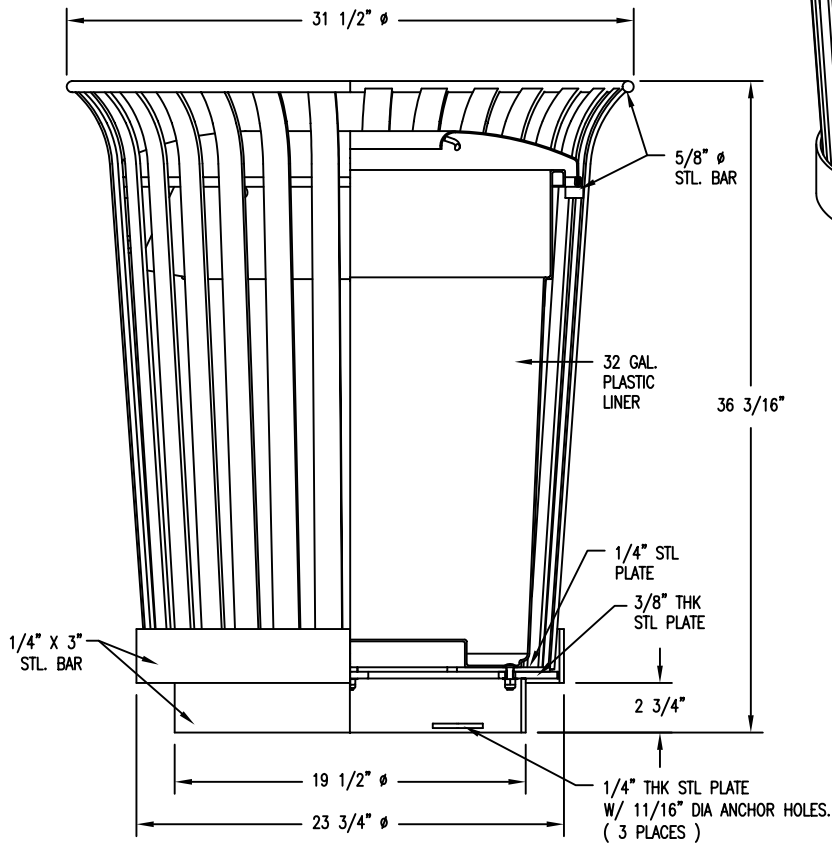
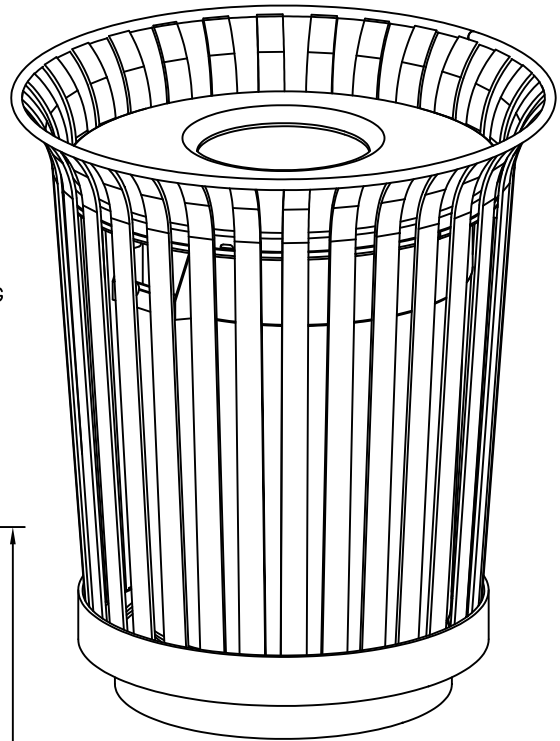
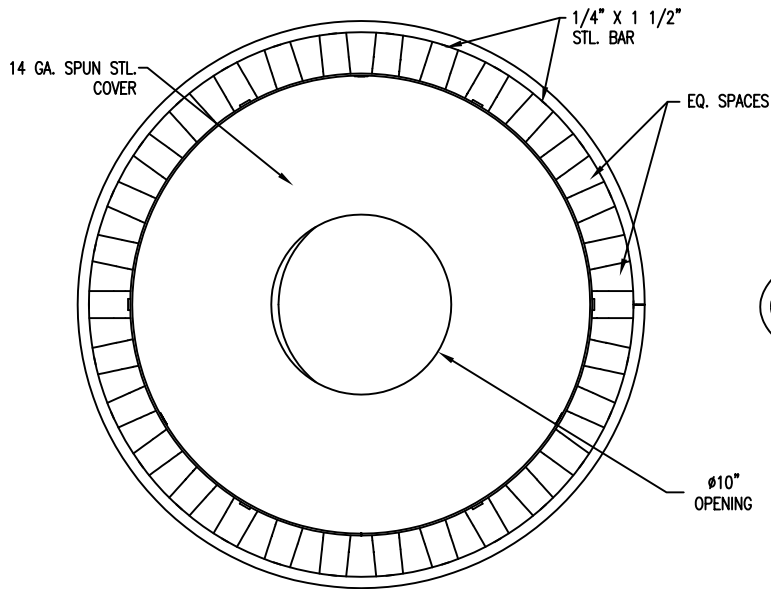
Rhapsody®

Specifications

Tube:	Comprised of 3.000" (76,2 mm) O.D. x (.125") (3,17 mm) wall aluminum tubing, and 1/2" (12,7 mm) diameter aluminum rod.
Frame:	Weldment comprised of 3.500" (88,9 mm) O.D. RS20 (.125") (3,17 mm) wall galvanized steel tubing, 1/4" stainless steel sheet and 3/8" (9,50 mm) thick HRPO steel sheet. Finish: ProShield®, color specified.
Mallet:	Comprised of 2" (50,8 mm) diameter light grey polyurethane, 1/2" (12,7 mm) diameter aluminum handle and 3/16" (4,74 mm) stainless steel cable with nylon coating.
Mallet Mount:	Permalene®, color specified.
Cables:	Comprised of 3/16" (4,74 mm) diameter stainless steel cable with nylon coating.
Music Hook:	Fabricated from 7 GA. (.188") (4,77 mm) stainless steel. Finish: TenderTuff coated. Gray in color.
Fasteners:	Primary fasteners shall be socketed and pinned tamperproof in design, stainless steel (SST) per ASTM F 879 unless otherwise indicated (see specific product installation/specifications).
Installation Time:	Approx. 1 person hours per chime.
Weight:	Chime 8 - DB 47 lbs. Chime 8 - SM 59 lbs. Chime 7 - DB 48 lbs. Chime 7 - SM 60 lbs. Chime 6 - DB 50 lbs. Chime 6 - SM 62 lbs. Chime 5 - DB 51 lbs. Chime 5 - SM 63 lbs. Chime 4 - DB 53 lbs. Chime 4 - SM 65 lbs. Chime 3 - DB 54 lbs. Chime 3 - SM 66 lbs. Chime 2 - DB 56 lbs. Chime 2 - SM 68 lbs. Chime 1 - DB 58 lbs. Chime 1 - SM 70 lbs.
Concrete:	5.24 Cubic Feet DB

Installation Instructions

- 1) **(Direct Bury)** Dig footing holes. Refer to the PlanView & Direct Bury Details.
 - 2) Attach cable to hooks. Refer to Detail 1.
 - 3) Attach hook to chime. Refer to Detail 2.
 - 4) Attach to Chime Frame on top and bottom. Refer to Detail 3, 4.
 - 5) Attach mallet to frame. Refer to Detail 5.
-
- 1) **(Surface Mount)** With sign in proper position, using 1/2" masonry bit and hammer drill, drill 3" deep holes into concrete slab through holes in post slate. Tap 1/2" x 2 3/4" expansion anchors into holes and secure using 1/2" standard hex nuts with 1/2" flat washers.
 - 2) Attach cable to hooks. Refer to Detail 1.
 - 3) Attach hook to chime. Refer to Detail 2.
 - 4) Attach to Chime Frame on top and bottom. Refer to Detail 3, 4.
 - 5) Attach mallet to frame. Refer to Detail 5.
 - 6) Install protective surfacing before users are allowed to play with component.



NOTES:

- 1.) ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.
- 2.) 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS PROVIDED.
- 3.) RECEPTACLE FULLY ASSEMBLED AT FACTORY.

DuMor, inc.
P.O. Box 142 Mifflintown, PA 17059-0142

SCALE : NONE
DATE DRAWN : 12/12/96
DRAWN BY : AH
DATE REV. : 12/3/12
REV. BY : JSB

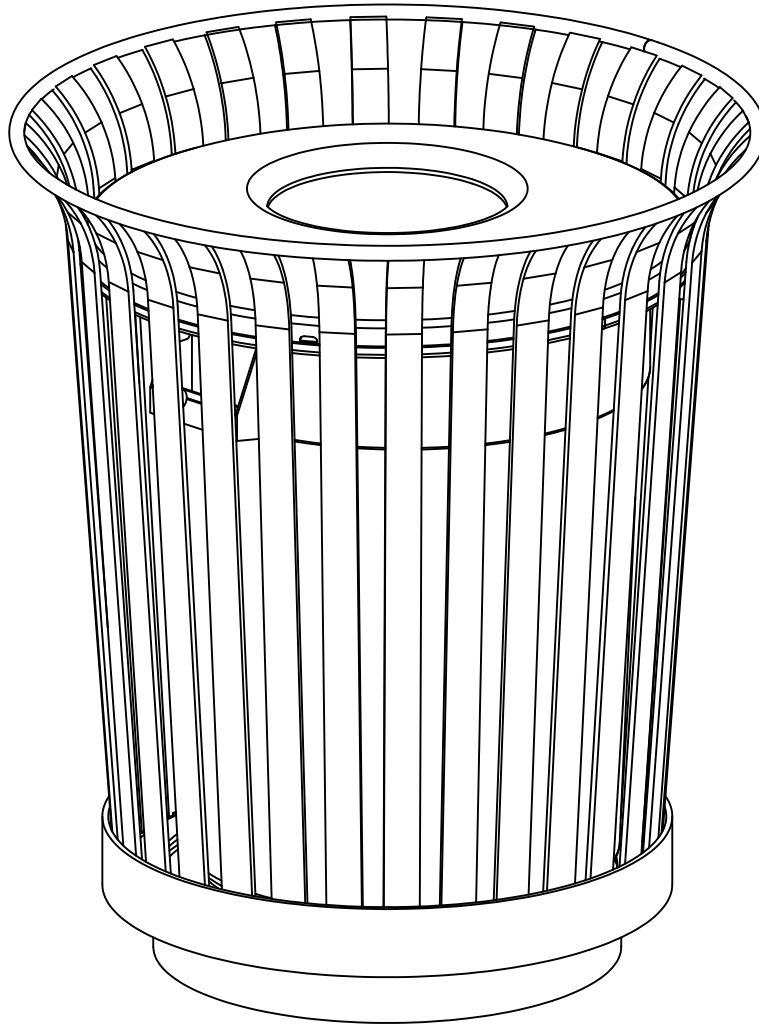
TITLE : RECEPTACLE

REV.
1

DRAWING
NUMBER

84-32-FT0

SHEET
1 OF 2



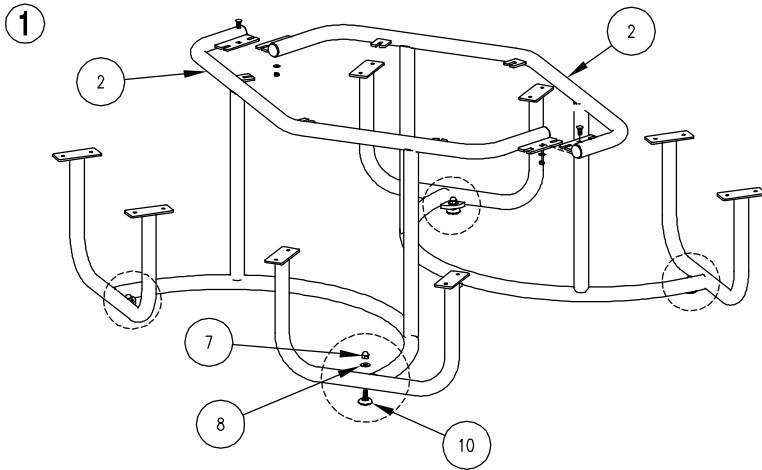
NOTE:

- 1.) RECEPTACLE SHIPPED FULLY ASSEMBLED.
- 2.) COVER ATTACHED W/ 1/8" VINYL COATED CABLE.
- 3.) MOUNT AND ANCHOR AS SPECIFIED.


DuMor, inc.
P.O. Box 142 Mifflintown, PA 17059-0142

SCALE : NONE
DATE DRAWN : 1/3/00
DRAWN BY : JSB
DATE REV. : 12/3/12
REV. BY : JSB

TITLE : RECEPTACLE ASSEMBLY
REV. 1
DRAWING NUMBER 84-32-FT0
SHEET 2 OF 2



GLIDE ATTACHMENT

1A: ATTACH 1/2" X 1" GLIDES USING HARDWARE (7, 8, & 10).
TIGHTEN TO SNUG FIT. REPEAT UNTIL ALL GLIDES ARE ATTACHED
AT CIRCLED LOCATIONS.

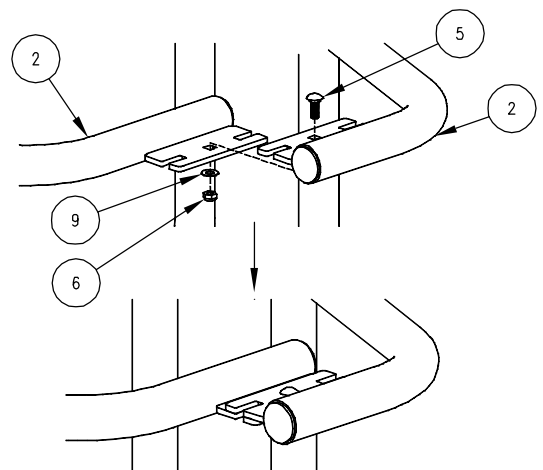
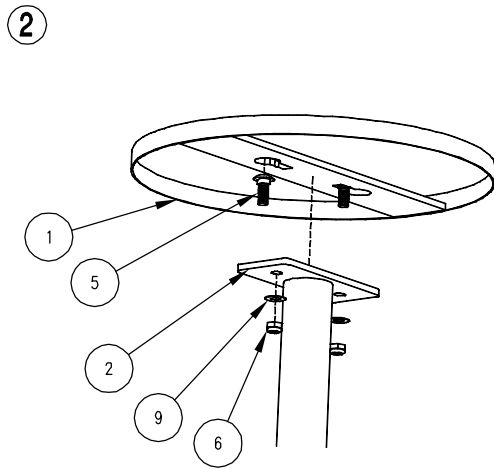


TABLE FRAME BOLTING DETAIL

1B: BOLT BOTH ENDS OF STL TABLE SUPPORT FRAME FOR 8 SEATS (2)
TOGETHER USING HARDWARE (5, 6, & 9). BE SURE TO PLACE THE
"TOP" BOLT PLATE (LABELED WITH "TOP" STICKER) OVER THE LOWER
BOLT PLATE ON EACH END OF SUPPORT FRAME (2). TIGHTEN TO SNUG FIT.



SEAT BOLTING

2A: ATTACH 14" DIA STL SEAT (1) TO STEP 1 ASSEMBLY USING
HARDWARE (5, 6, & 9). TIGHTEN TO SNUG FIT. REPEAT UNTIL ALL
14" DIA STL SEATS ARE ATTACHED.

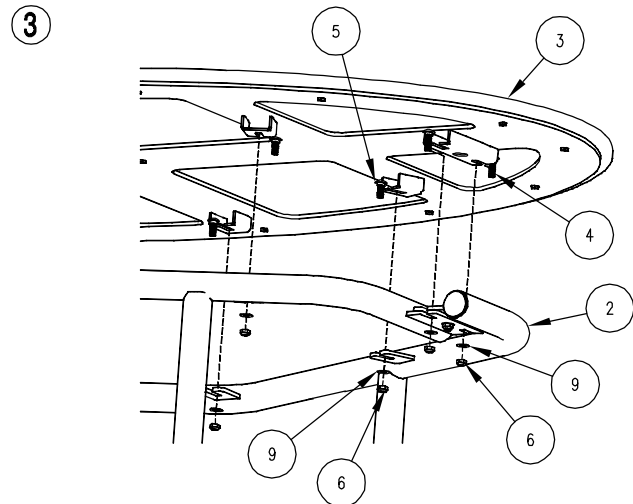


TABLE TOP BOLTING

3A: ATTACH PLASTIC TABLE TOP ASSEMBLY (3), TO TABLE SUPPORT FRAME (2)
USING HARDWARE (4, 5, 6, & 9). TIGHTEN TO SNUG FIT.

4

4A: UPON COMPLETION OF TABLE ASSEMBLY SQUARE ALL COMPONENTS THEN
TIGHTEN ALL HARDWARE.

NOTES:

1.) THE ACTUAL PARTS WILL NOT BE NUMBERED;
NUMBERS ONLY APPLY TO DRAWING.

ITEM	QTY	PART NO	DESCRIPTION
1	8	0-198-00-02	14" DIA STL SEAT
2	2	0-198-80-01	STL TABLE SUPPORT FRAME FOR 8 SEATS
3	1	0-198-80PL	OVAL TABLE TOP ASSEMBLY, PLASTIC
4	4	1-11-019	3/8" X 1 1/4" SS CGE BOLT
5	24	1-11-028	3/8" X 1" SS CGE BOLT

ITEM	QTY	PART NO	DESCRIPTION
6	28	1-20-019	3/8" SS THIN NYLON LOCKNUT
7	4	1-21-019	1/2" SS HEX ACORN NUT
8	4	1-22-015	1/2" SS FLAT WASHER
9	28	1-22-024	3/8" SS FLAT WASHER
10	4	5-48-096	1/2" X 1" SWIVEL GLIDE

DuMor, inc.
P.O. Box 142 Mifflintown, PA 17059-0142

SCALE : NONE
DATE DRAWN : 9/24/10
DRAWN BY : JSB
DATE REV. : 12/15/11
REV. BY : RDH

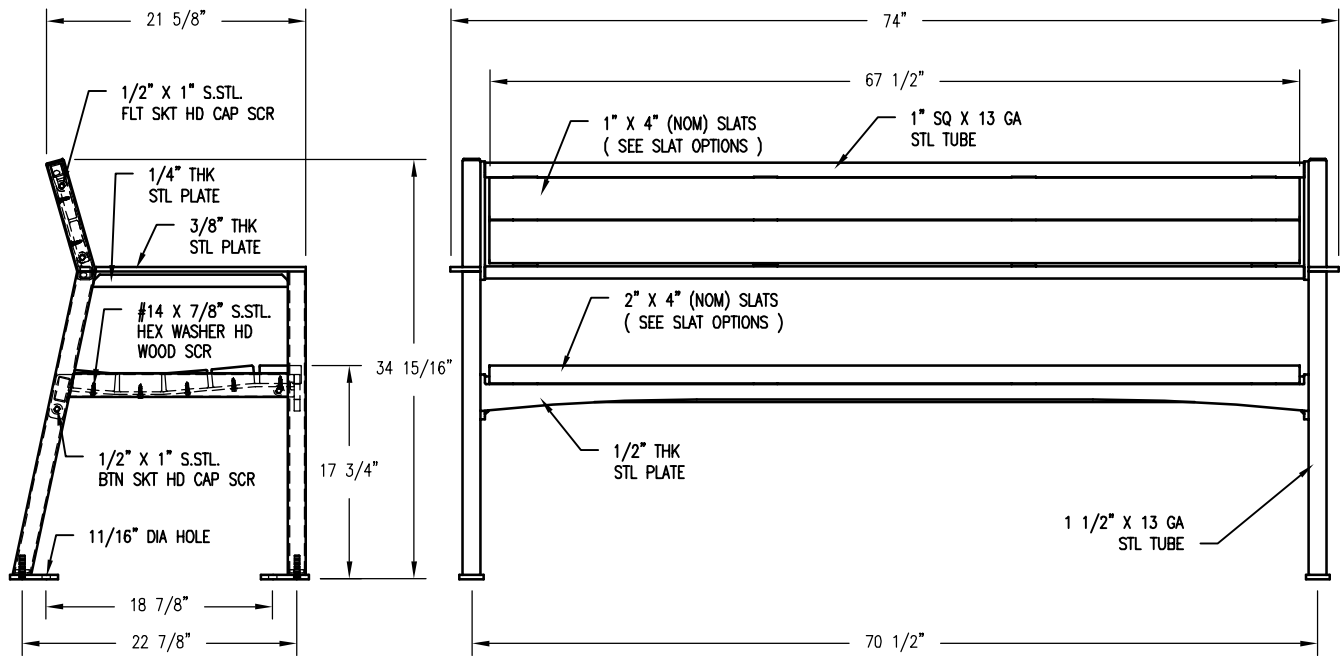
TITLE : TABLE DETAIL

REV.
E

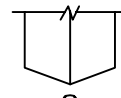
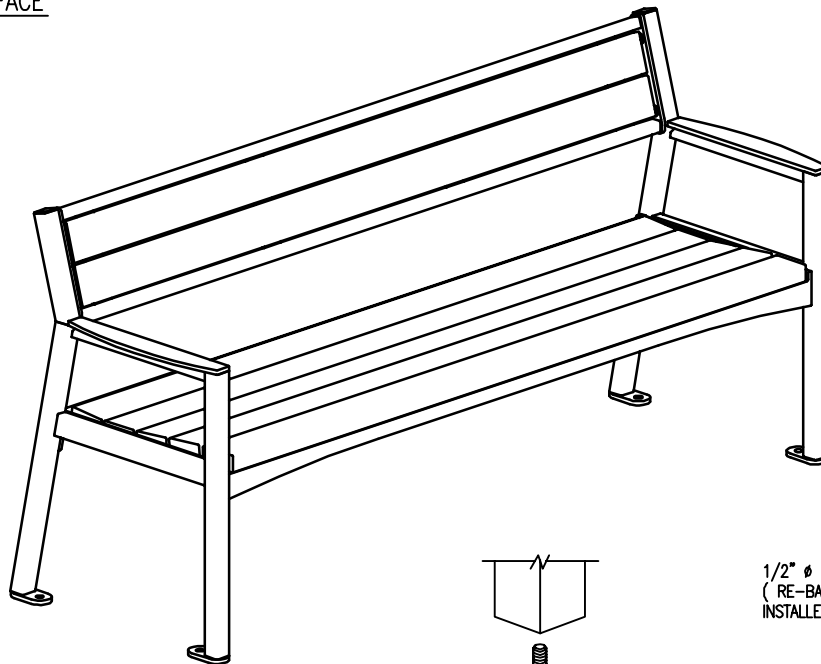
DRAWING
NUMBER

198-80PL

SHEET
2 OF 2



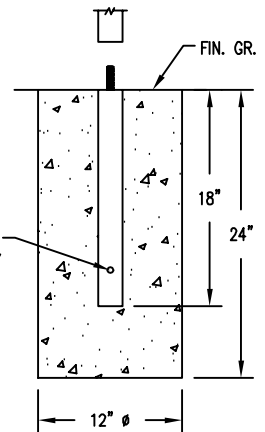
☐ S-2 SURFACE



NYLON PAD

☐ S-5 FREE STANDING

1/2" Ø HOLE
(RE-BAR BY
INSTALLER)



☐ S-1 EMBEDMENT

NOTES:

- 1.) ALL STL. MEMBERS COATED W/ ZINC RICH EPOXY THEN FINISHED W/ POLYESTER POWDER COATING.
- 2.) 1/2" X 3 3/4" EXPANSION ANCHOR BOLTS PROVIDED FOR S-2.

SLAT OPTIONS

- ☐ ANTIQUE MAHOGANY TEXTURED
- ☐ BRAZILIAN WALNUT TEXTURED
- ☐ OTHER _____

NOTES:

- 1.) DURING ASSEMBLY PROCEDURE;
DO NOT COMPLETELY TIGHTEN HARDWARE.
- 2.) THE ACTUAL PARTS WILL NOT BE NUMBERED.
NUMBERS ONLY APPLY TO DRAWING.
- 3.) UPON COMPLETION OF ASSEMBLY SQUARE
ALL COMPONENTS THEN TIGHTEN ALL HARDWARE.
- 4.) MOUNT AND ANCHOR AS SPECIFIED.

TOOLS REQ'D

3/4" WRENCH
5/16" NUT DRIVER OR FLAT HEAD DRILL BIT
5/16" ALLEN WRENCH
1/2" MASONRY DRILL BIT
DRILL

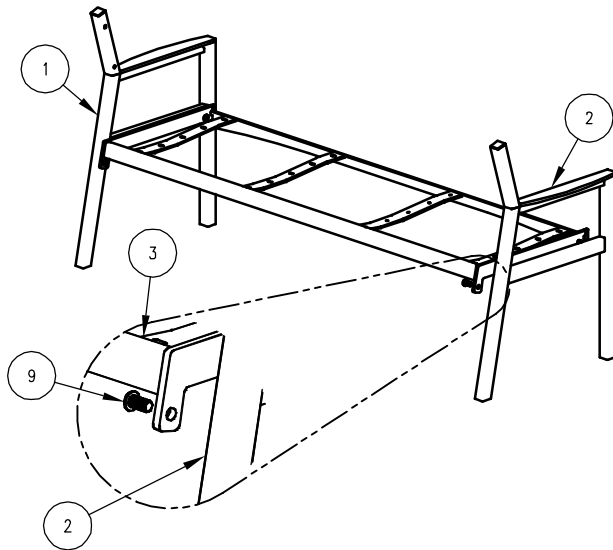
PARTS LIST

ITEM	QTY	PART NO	DESCRIPTION
1	1	0-500-00-01L	STL END SUPPORT - LEFT
2	1	0-500-00-01R	STL END SUPPORT - RIGHT
3	1	0-500-60-02	6' STL SEAT
4	1	0-500-60-03	6' STL BACKREST
5	2	0-500-60TX-04	1" X 4" X 67 1/2" SLAT, TX
6	5	0-500-60TX-05	2" X 4" X 67 1/2" SLAT, TX
7	4	0-502-00-06/S-2	SURFACE MOUNT FOOT PAD
8	4	1-12-014	1/2" X 1" SS FLT SKT HD CAP SCR
9	4	1-12-056	1/2" X 1" SS BTN SKT HD CAP SCR
10	28	1-16-023	#14 X 7/8 SS HX WASH HD 'A' SLTD WD SCREW

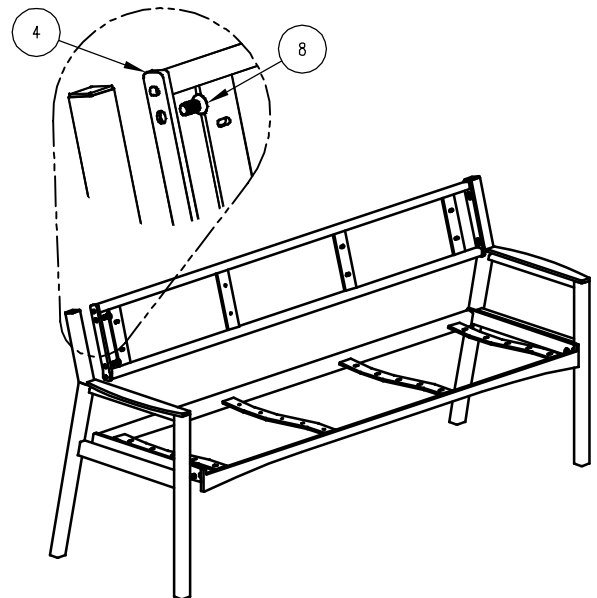
KITS PROVIDED

ITEM	QTY	PART NO	DESCRIPTION
11	1	K-ANCO860-4	1/2" X 3 3/4" SS ANCHOR KIT (4PC)
12	1	K-BC0816-4	1/2" CAP HARDWARE KIT (4PC)
13	1	K-FC0816-4	1/2" CAP HARDWARE KIT (4 PCS)
14	1	K-WS1414-30	#14 HEX HD WASH WOOD SCR (30PC)

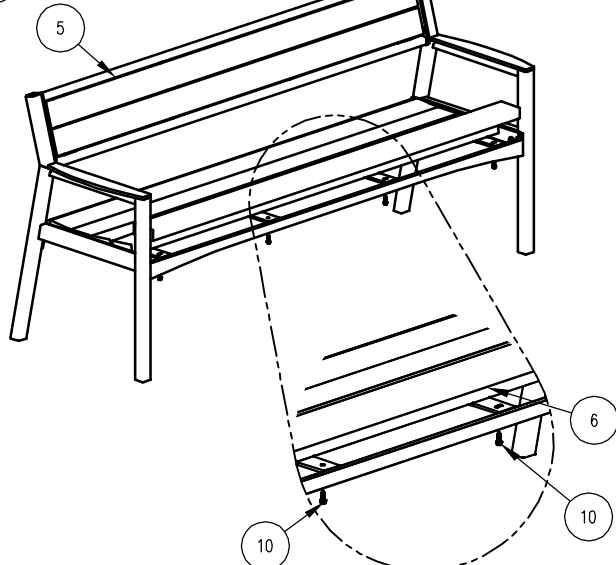
1 ATTACH SEAT TO END SUPPORTS.



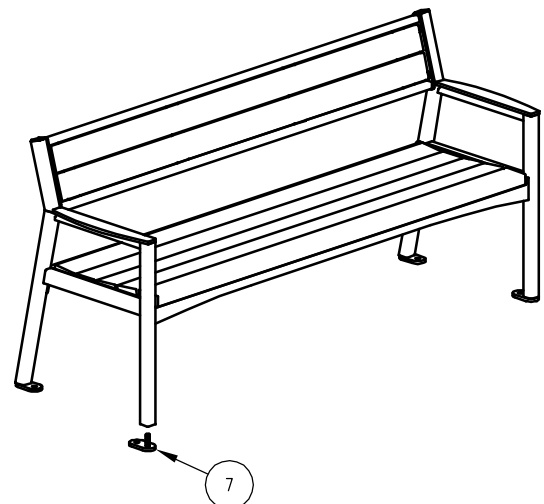
2 ATTACH BACK TO STEP 1.



3 ATTACH SLATS TO STEP 2.



4 ATTACH SURFACE MOUNT FOUR PAD TO STEP 3.





DERO
A PLAYCORE Company



Hoop Rack

Heavy Duty



For added security and peace of mind, the Heavy Duty Hoop Rack uses a larger, thicker pipe than our standard Hoop Rack. The Heavy Duty Hoop meets APBP guidelines for u-lock compatibility and two points of support for the bike.

Hoop Rack Heavy Duty



YOUR **LOGO** HERE

Customize the HoopRack Heavy Duty to brand your bike parking!



FINISH OPTIONS

Galvanized



Stainless

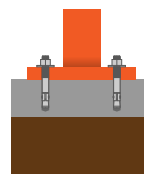


Powder Coat



MOUNT OPTIONS

Surface

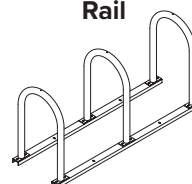


In-Ground



Tamper-resistant fasteners available upon request

Rail



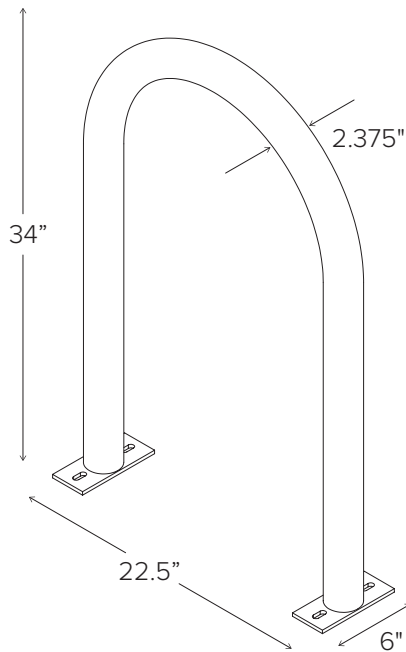
OPTIONAL LEAN BAR



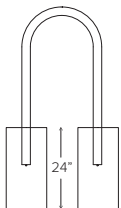
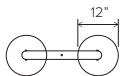
DERO
A PLAYCORE Company

Hoop Rack Heavy Duty

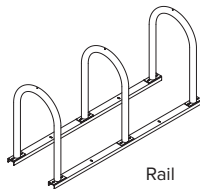
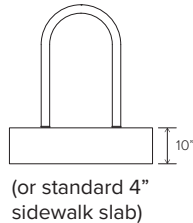
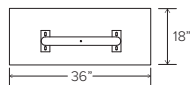
Submittal Sheet



IN-GROUND MOUNT



SURFACE MOUNT



Rail

CAPACITY

2 Bikes

MATERIALS

2" schedule 40 pipe (2.375" OD)

FINISHES



Galvanized

An after fabrication hot dipped galvanized finish is our standard option.



Powder Coat

Our powder coat finish assures a high level of adhesion and durability by following these steps:

1. Sandblast
2. Epoxy primer electrostatically applied
3. Final thick TGIC polyester powder coat



Stainless

Stainless Steel: 304 grade stainless steel material finished in either a high polished shine or a satin finish.

MOUNT OPTIONS



Surface

Foot Mount has two 2.5" x 6" x .25" feet with two anchors per foot. Specify foot mount for this option. Tamper-resistant fasteners available upon request.



In-Ground

In-ground mount is embedded into concrete base. Specify in-ground mount for this option.



Rail

Rail Mounted Downtown Racks are bolted to two parallel rails which can be left freestanding or anchored to the ground. Rails are heavy duty 3" x 1.4" x 3/16" thick galvanized mounting rails. Specify rail mount for this option.

Rack Angle:



90



45A



45B



60A

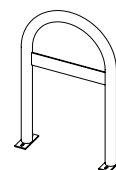


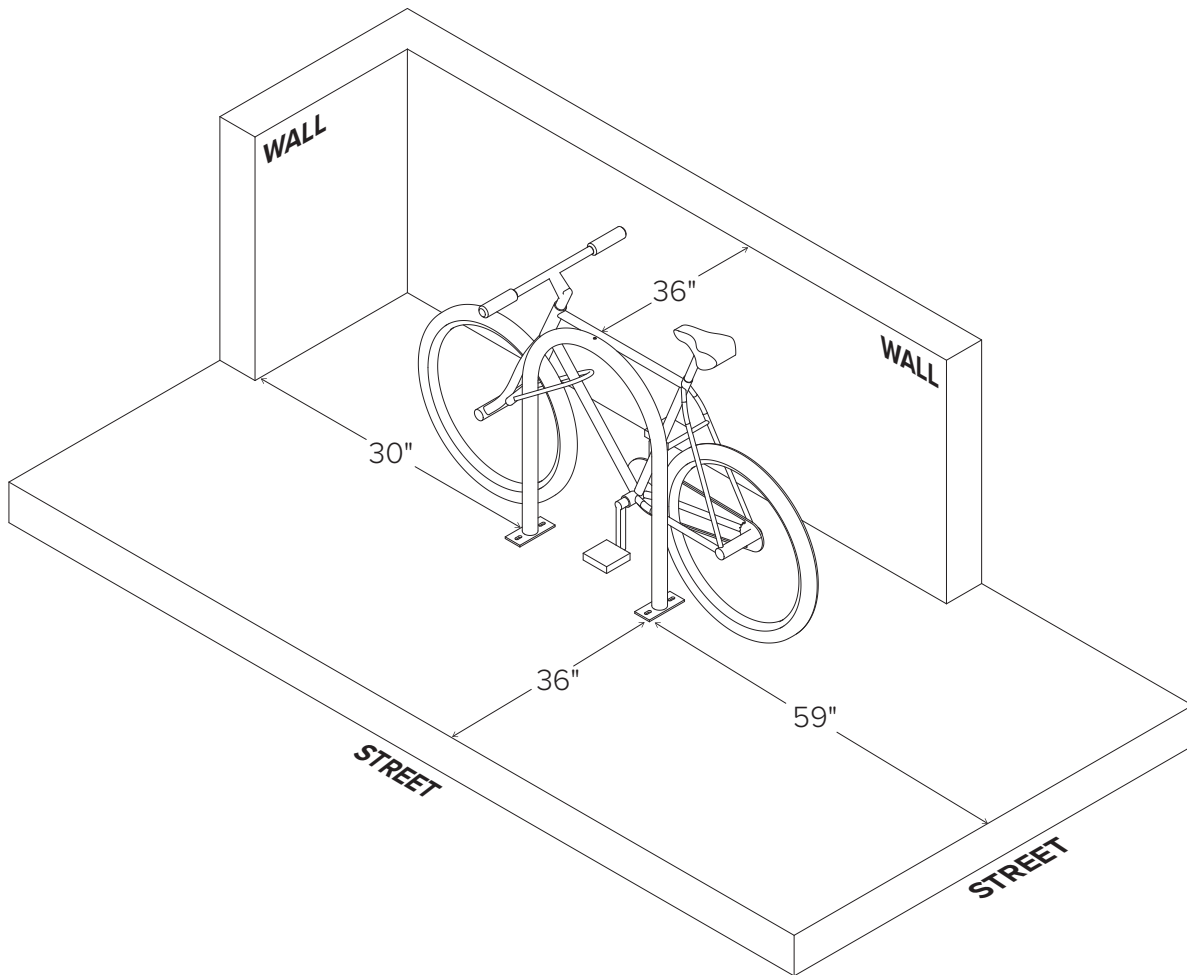
60B

OPTIONAL LEAN BAR

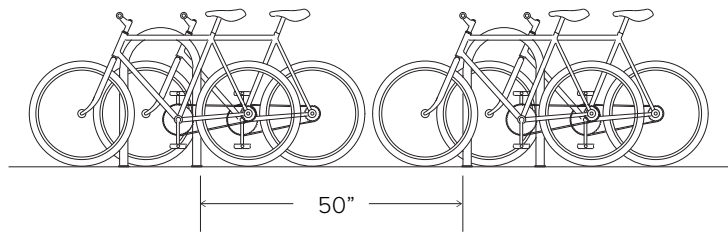


Add Lean Bar

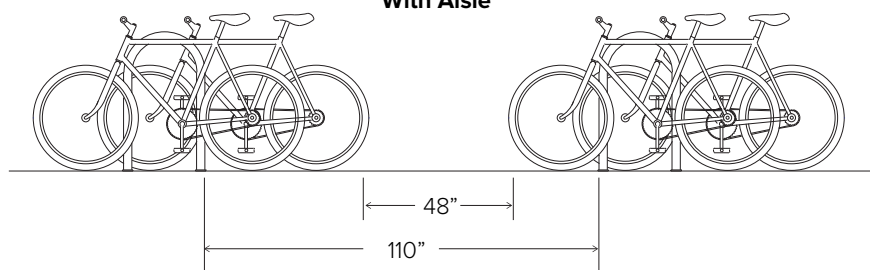




No Aisle



With Aisle





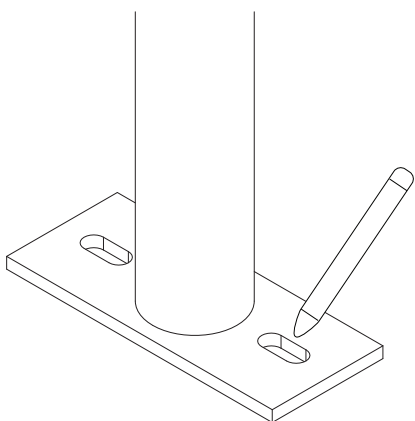
TOOLS NEEDED

Tape Measure
 Marker or Pencil
 Masonry Drill Bit
 Drill (Hammer drill recommended)
 Hammer
 Wrench 9/16"
 Level

RECOMMENDED BASE MATERIAL

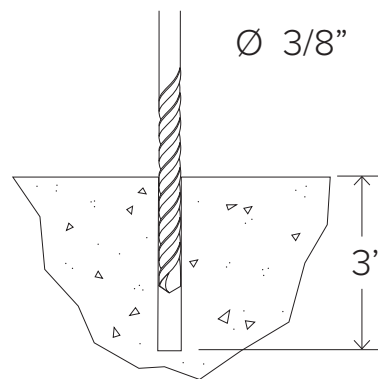
Solid concrete is the best base material for installation. To ensure the proper anchors are shipped with your rack, ask your Dero Rack representative which anchor is appropriate for your application. Be sure nothing is underneath the base material that could be damaged by drilling.

1



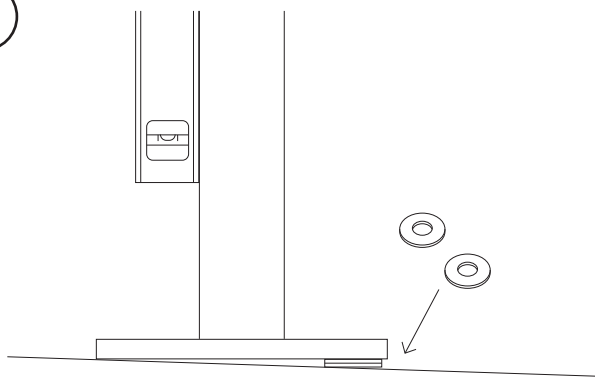
Place the rack in the desired location. Use a marker or pencil to outline the holes of the flange onto the base material.

2



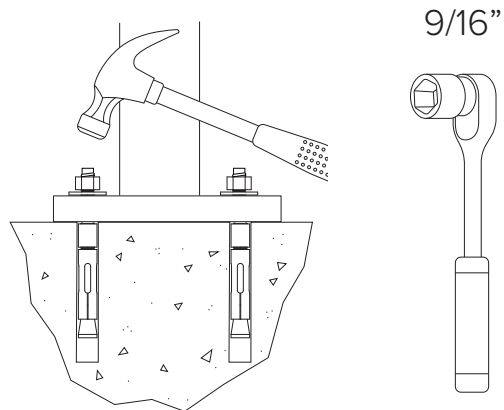
Drill 3/8" diameter holes 3" deep into surface. Make sure the holes are at least 3" away from any cracks in the base material.

3



Place rack (and washers to level rack if necessary) over holes.

4



Thread nuts onto anchors, leaving approximately 1/4" of the anchor protruding, and tap into surface. Tighten nuts down to secure rack.

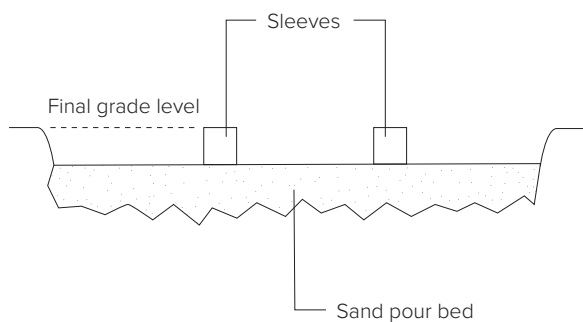


TOOLS NEEDED

Level
Cement mixing tub
Shovel

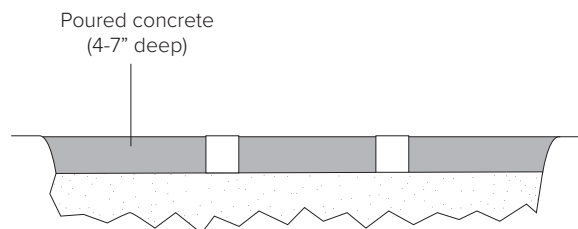
Trowel
Corrosion-Resistant Sleeve (min. 3" diameter)
Materials to build brace (see "Install Tip" at bottom of page)

1



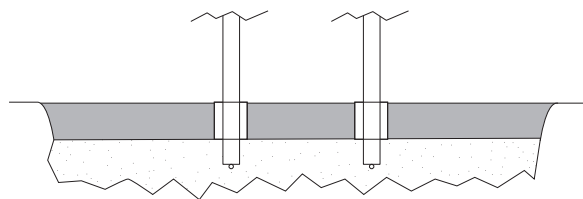
Place corrosion resistant sleeve (min. 3" inside diameter) in sand pour bed in exact location where rack will be installed. Make sure top of sleeve is at same level as desired finished concrete surface. Fill sleeve with sand to keep it in place and prevent it from filling with concrete.

2



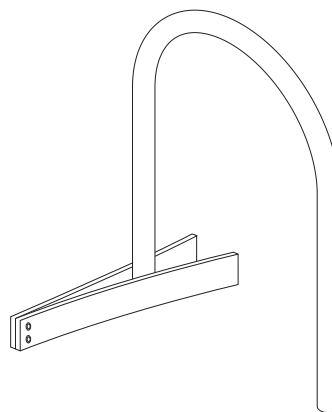
Pour concrete and allow to cure.

3



After appropriate cure time, dig out sand from sleeves and insert rack, making sure it is level and at the appropriate height. Pour in Super Por-Rok or epoxy grout and allow to set.

TIP



An easy way to brace the rack while the grout sets is to bolt two 1x4" boards together at one end and clamp them onto the legs of the rack like a clothes pin.

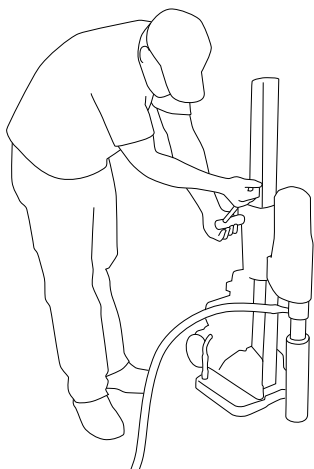


TOOLS NEEDED

Level
Cement mixing tub
Shovel
Access to water hose

Trowel
Hole coring machine with 4" bit
Materials to build brace (see "Install Tip" at bottom of page)

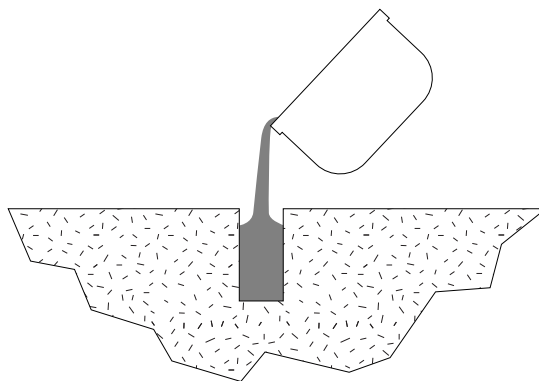
1



Ø 3" min.
↓ 10" min.

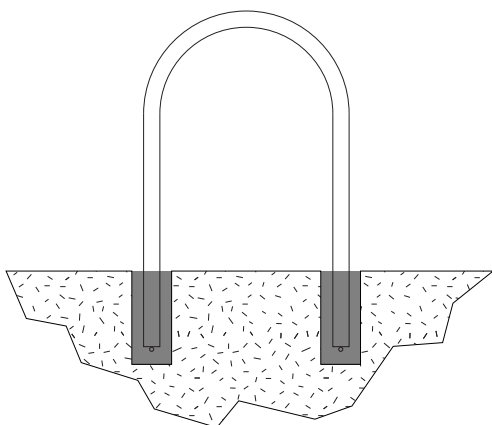
Core holes no less than 3" diameter (4" recommended) and no less than 10" deep into sidewalk.

2



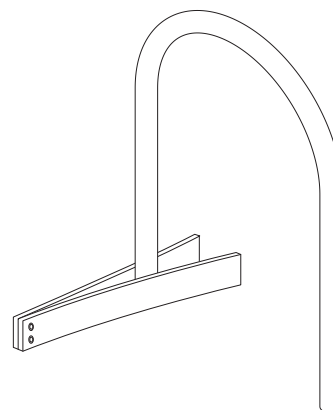
Fill holes with Super Por-Rok or epoxy grout.

3



Place rack into holes, making sure it is level until the grout has set. 33"-36" of the rack should remain above the surface.

TIP



An easy way to brace the rack while the grout sets is to bolt two 1x4" boards together at one end and clamp them onto the legs of the rack like a clothes pin.

RAIL MOUNTED RACKS

Rail mounted racks are standard foot mounted racks attached with bolts to a rail as in the diagram at left. Rail mounted racks provide more flexibility than other mounting options while providing the same degree of security.

Rail mounted racks can be left freestanding, or they can be anchored to the ground using several anchors. This option allows for easier snow removal and sweeping. Installation of rail mounted racks is also much less expensive than embedding the racks into the ground.

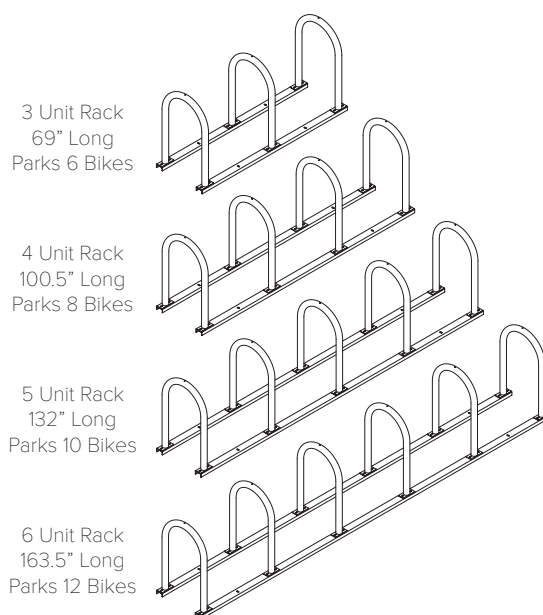
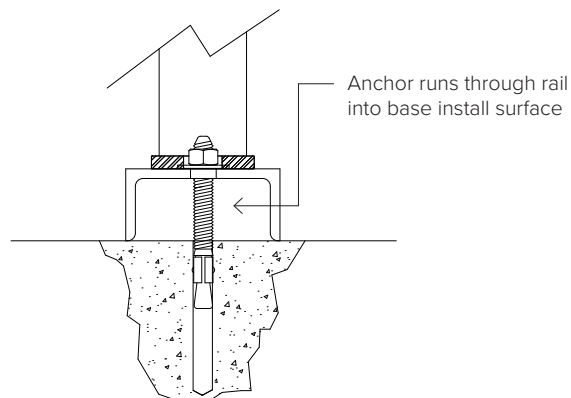
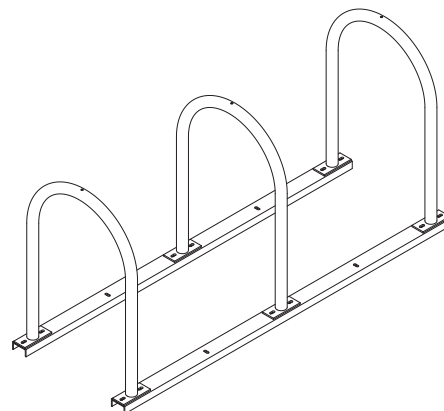
* Note: Though racks may be painted, the rails will remain with only a galvanized finish

ADVANTAGES:

- Easier and inexpensive installation
- Can be left freestanding or anchored to the ground
- Easier to remove for sweeping and snow removal

APPLICATIONS:

- Installation to pavers
- Asphalt Installations
- Ground, dirt, or mulch
- Situations where the rack needs to be moved occasionally





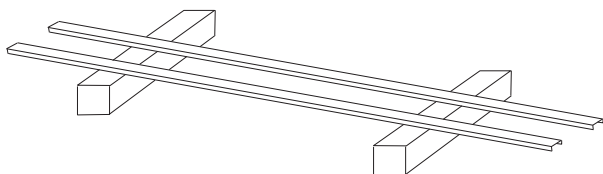
TOOLS NEEDED

9/16" Socket set
 Two 4" x 4" x 28" (or larger) blocks
 4 bolts, nuts and washers for every rack
 (included). If using a tamper resistant nuts,
 install two tamper resistant nuts with each rack.

ANCHORING THE RAILS

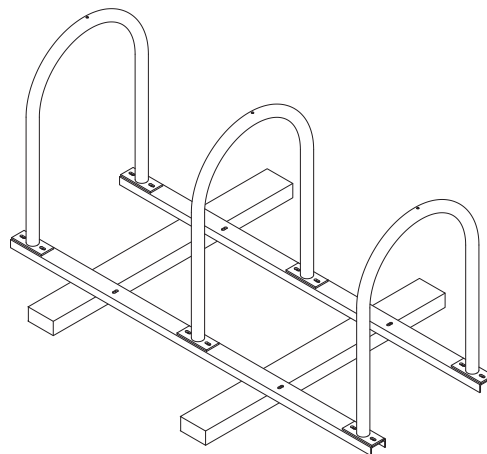
To anchor the rails to concrete, place 3.75" wedge anchor through holes in the rail into the concrete. Secure with nut.

1



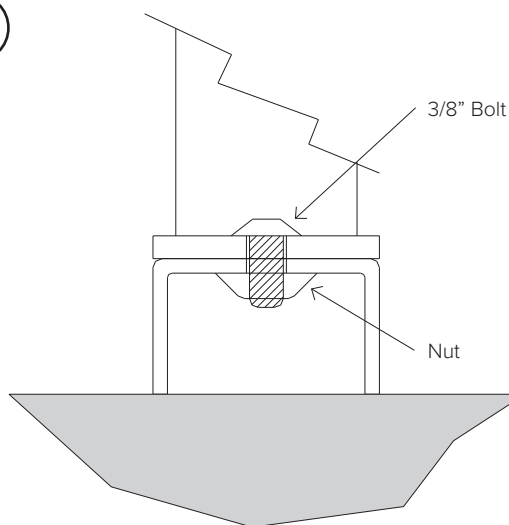
Lay out the two channel beams where the rack will be placed. Place the two beams on top of the two blocks of wood so that the open part of the channel faces the ground.

2



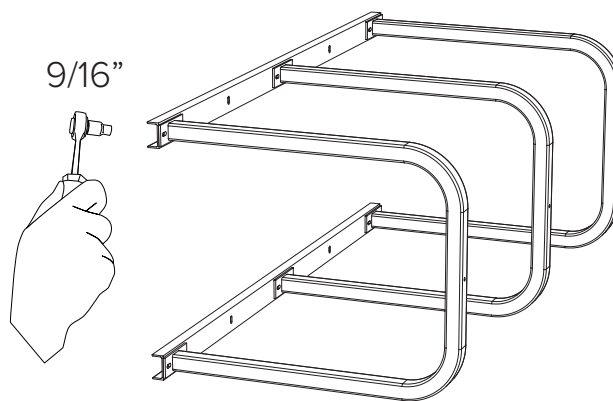
Place racks on beams so holes in rack flanges line up with beam slots

3



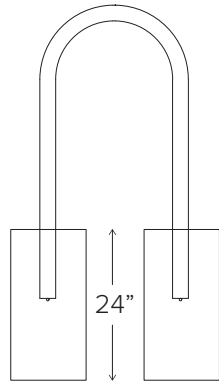
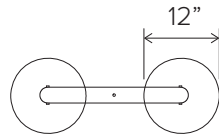
Put bolts through rack flange holes and beams so bolt head faces up. **HAND** tighten the nuts using new flange nuts.

4

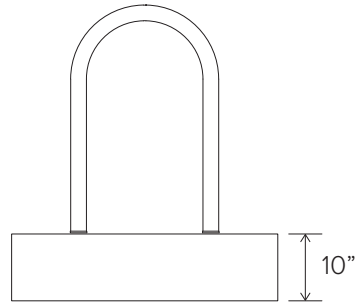
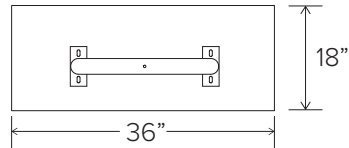


Once nuts are on, tip assembled rack over and use a 9/16" socket to tighten nuts. Before fully tightening nuts, make sure the racks are straight on beams. If using tamper resistant nuts, use access tool to tighten nuts. Do not overtighten the tamper resistant nuts. Tip rack upright.

IN-GROUND MOUNT



SURFACE MOUNT



(or standard 4" sidewalk slab)



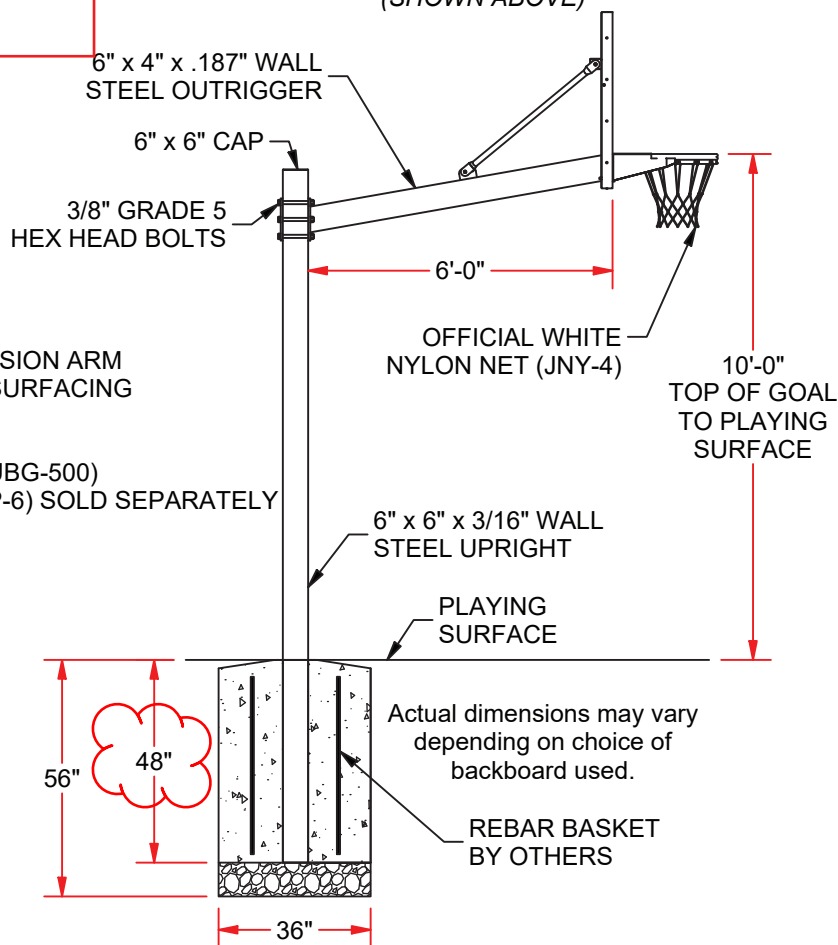
SQUARE POST OUTDOOR BASKETBALL w/ 6 FT DIRECT MOUNT



770-AC-UG
(SHOWN ABOVE)
(2) Standard Height



660-AC-UG
(SHOWN ABOVE)



FEATURES:

- > 6" SQUARE STEEL UPRIGHT w/ ANGLED EXTENSION ARM
- > HEIGHT CAN BE ADJUSTED AFTER COURT RESURFACING
- > GALVANIZED COAT FINISH FOR 660
- > BLACK POWDER COAT FINISH FOR 770
- > HEAVY DUTY GOAL & NYLON NET INCLUDED (UBG-500)
- > BOLT-ON BACKBOARD EDGE PADDING (MBBP-6) SOLD SEPARATELY
- > ALL BACKBOARDS 72" x 42"

GALVANIZED POST:

- > ACRYLIC BACKBOARD (660-AC-UG)
- > STEEL BACKBOARD (660-RS-UG)
- > PERFORATED STEEL BACKBOARD (660-PF-UG)

BLACK POWDER COAT POST:

- > ACRYLIC BACKBOARD (770-AC-UG)
- > STEEL BACKBOARD (770-RS-UG)
- > PERFORATED STEEL BACKBOARD (770-PF-UG)

Concrete footing to be 5' deep 3 (extends 6" beyond post depth)



660 / 770 Total of 2

SQUARE POST OUTDOOR BASKETBALL
w/ 6 FT DIRECT MOUNT

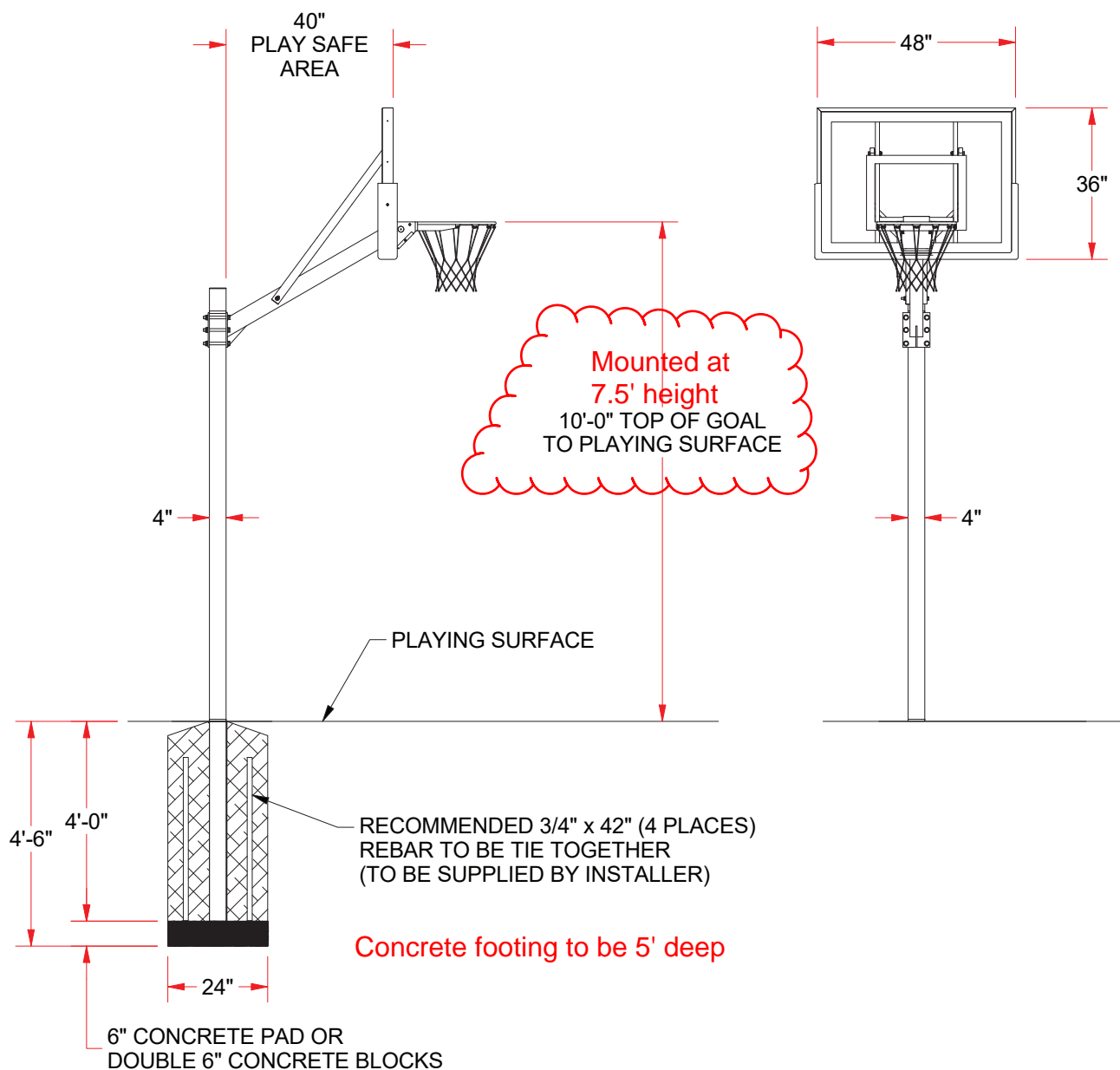
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Sheet 1 of 1



400-AC-FG THE CHURCH YARD W/ACRYLIC BOARD



FEATURES:

- > FIXED HEIGHT UNIT BURIES 48" INTO GROUND
- > HEIGHT CAN BE ADJUSTED AFTER COURT RESURFACING OR FOR KIDS PLAY.
- > 4" SQUARE STEEL UPRIGHT AND ANGLED EXTENSION ARM
- > 40" EXTENSION ARM FOR "PLAY SAFE AREA"
- > HEAVY-DUTY FLEX GOAL AND NYLON NET INCLUDED
- > POST PADDING AND BACKBOARD EDGE PADDING INCLUDED
- > ACRYLIC BACKBOARD: 48" x 36"

(1) Youth Height



400-AC-FG

THE CHURCH YARD W/ACRYLIC BOARD

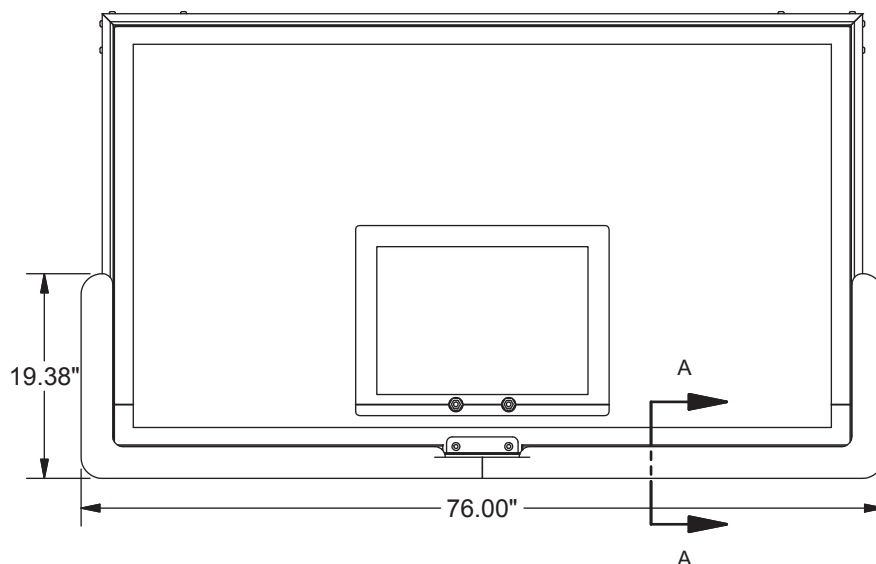
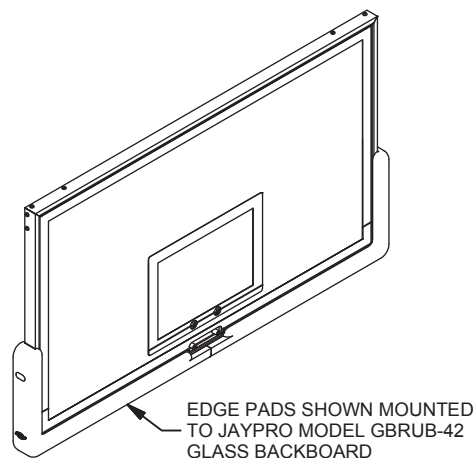
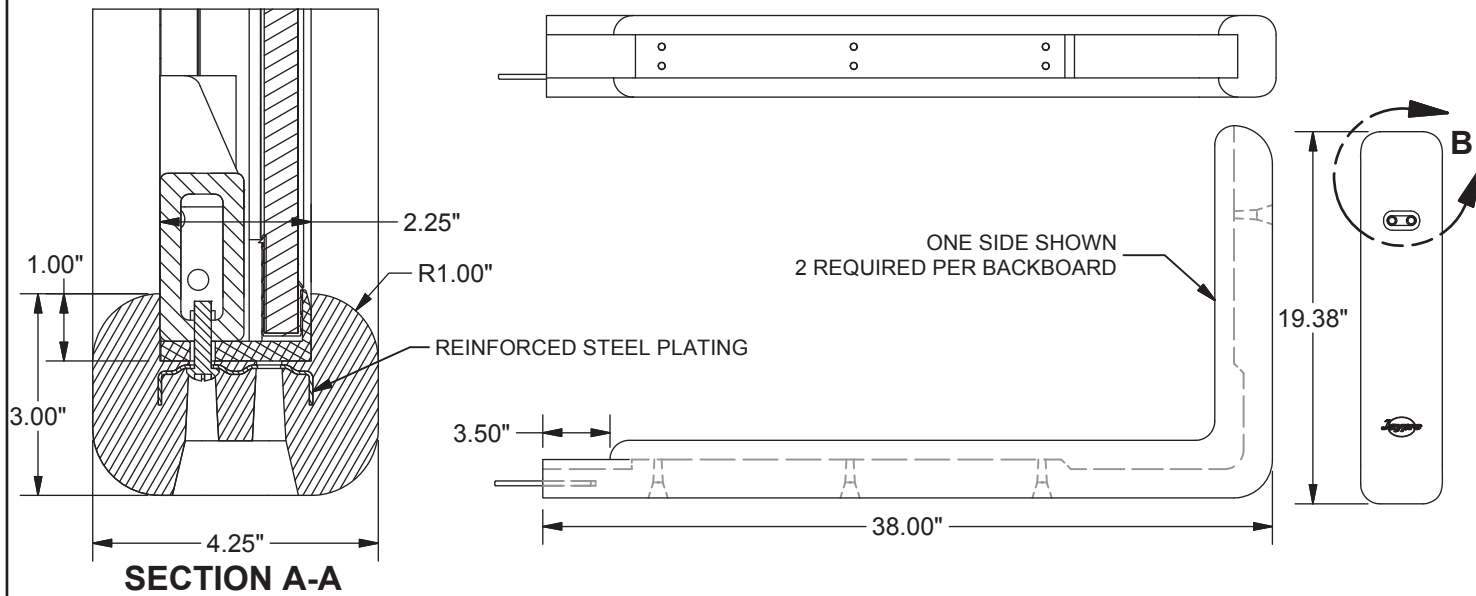
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Sheet 1 of 1



MBBP-6 Safe-Pro™ EDGE PADDING



16 AVAILABLE COLORS:

- | | | | |
|--|---|---------------------------------------|---------------------------------------|
| <input type="checkbox"/> Royal Blue | <input checked="" type="checkbox"/> Black | <input type="checkbox"/> Scarlet | <input type="checkbox"/> Old Gold |
| <input type="checkbox"/> Navy Blue | <input type="checkbox"/> Purple | <input type="checkbox"/> Cardinal | <input type="checkbox"/> Yellow |
| <input type="checkbox"/> Columbia Blue | <input type="checkbox"/> Light Purple | <input type="checkbox"/> Burnt Orange | <input type="checkbox"/> Kelly Green |
| <input type="checkbox"/> Gray | <input type="checkbox"/> Maroon | <input type="checkbox"/> Orange | <input type="checkbox"/> Forest Green |

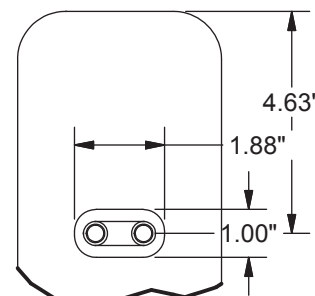
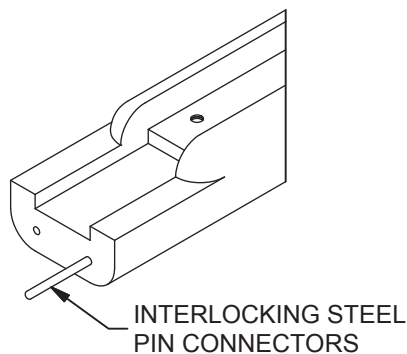
PROJECT NAME _____

PROJECT NUMBER _____

ARCHITECT _____

CONTRACTOR _____

NOTES _____



DETAIL B



MBBP-6

Safe-Pro™ Edge Padding

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Sheet 1 of 2



SPECIFICATION SHEET

The Safe-Pro™ MBBP-6 edge padding shall meet all requirements / recommendations of the NCAA, NFSHSA, WNBA, and NBA. The padding shall cover the bottom surface of the board and the side surface to a distance of 17-3/8" and be not less than 2" thick. The front and back surface shall be covered to a minimum distance of 3/4" up from the bottom and be not less than 1" in thickness. The padding shall be 1" thick from the front and back surface of the backboard.

Competition series bolt-on backboard edge padding are for 72" glass backboards. Molded from color matched self-skinning urethane foam in a two-piece design. The exterior of the MBBP-6 edge pads are of a tough molded urethane skin to provide the exterior with a uniform colored appearance. Steel plates shall be molded in the padding to facilitate the attachment of the padding to the backboard with bolts. All attachment hardware shall be within the inherent molded recesses of the pads at the required attachment locations. Interlocking steel pin connectors shall be provided at the match point between the two halves to provide adequate alignment and eliminate sagging of the edge pads underneath the goal.

Packaged in pairs, one pair will complete on backboard. All 3/8" attachment hardware is included.

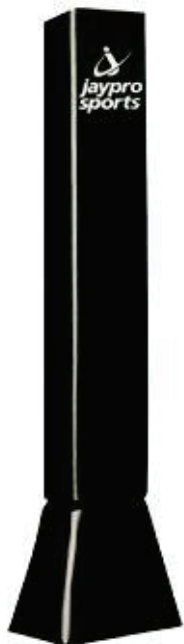
WARRANTY

MBBP-6 Safe-Pro™ Edge Padding shall be warranted free from manufacturing defects for a period of (8) eight years.

Color Options (Specify): Royal Blue, Navy Blue, Columbia Blue, Gray, Black, Purple, Light Purple, Maroon, Scarlet, Cardinal, Burnt Orange, Orange, Old Gold, Yellow, Kelly Green, Forest Green



PP-66 BASKETBALL POST & GUSSET PADDING



FEATURES:

- > SIZE: 6" x 6"
- > 6' TALL x 2" THICK SQUARE BLACK POST & GUSSET PADDING
- > ATTACHES WITH HOOK-&-LOOK CLOSURE
- > OTHER AVAILABLE SIZES: 6" x 8" (P/N: PP-68), 5" x 5" (P/N: PP-55) & 4" x 4" (P/N: PP-44)



PP-66
BASKETBALL
POST & GUSSET PADDING

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Sheet 1 of 1



FIXED HEIGHT BASKETBALL SYSTEM

Item # **400-AC-FG**
 400-FA-FG

ASSEMBLING INSTRUCTIONS AND OWNER'S MANUAL



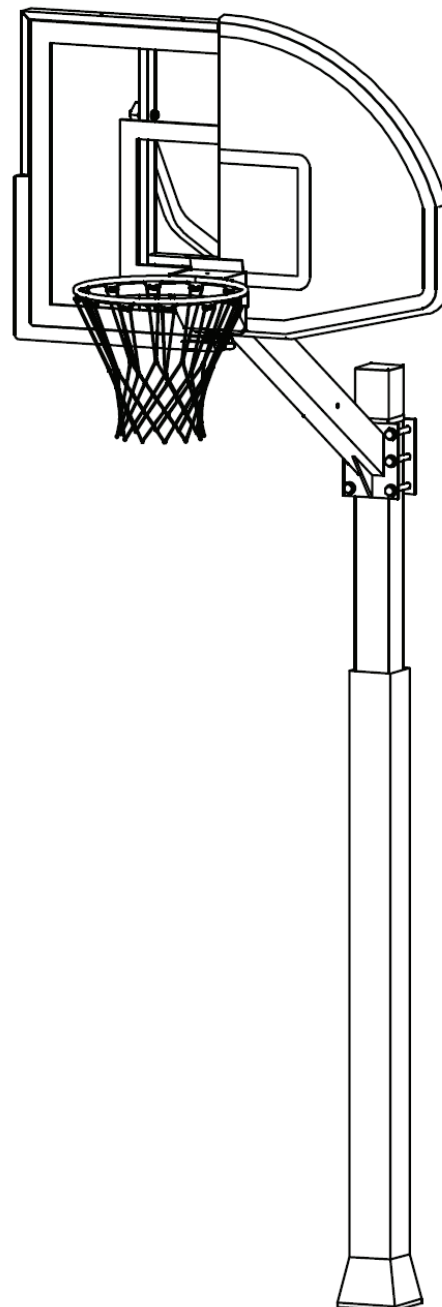
WARNING



FAILURE TO COMPLY WITH ANY
OF THE WARNINGS IN THESE
INSTRUCTIONS MAY RESULT IN
SERIOUS PERSONAL INJURY.

FAILURE TO COMPLY MAY ALSO
RESULT IN PROPERTY DAMAGE.
PLEASE HEED ALL WARNINGS AND
CAUTIONS TO ENSURE YOUR SAFETY.

DO NOT ATTEMPT TO ASSEMBLE THIS
SYSTEM WITHOUT CAREFULLY
READING AND FOLLOWING ALL
INSTRUCTIONS. BEGIN BY
IDENTIFYING AND TAKING
INVENTORY OF ALL PARTS USING
THE PARTS LIST PROVIDED.



Keep this instruction manual in case you have to contact the manufacturer for replacement parts.

TOOLS AND MATERIALS REQUIRED FOR ASSEMBLY
(Not Included)

- | | |
|--------------------------|--|
| 1. 2 Adjustable Wrenches | 10. Concrete-1/2 yard or 14-16 Bags, (80 lb. bags) |
| 2. Socket Set | 11. Phillips Head Screwdriver |
| 3. 9/16" Wrench | 12. Electric Drill |
| 4. 3/4" Wrench | 13. Carpenter's Level |
| 5. 15/16" Wrench | 14. A minimum of 2 Ladders |
| 6. 1/2" Wrench | 15. Water Supply |
| 7. Hammer or Mallet | 16. Degreaser |
| 8. Tape Measure | 17. 1/4" Drill Bit |
| 9. Shovel | |

****A MINIMUM OF SIX ADULTS IS REQUIRED TO LIFT UNIT INTO PLACE****



BEFORE YOU START



- Identify and inventory all parts using the checklist boxes in the parts list. Be sure to keep the hardware bags and their contents separate. If any parts are missing call Ourt Customer Service Department (800-243-0533).
- Test fit all Bolts by inserting them into the respective hole. If necessary, carefully Scrape away any excess powder coating buildup from inside the holes. Do not Scrape away all of the powder coating. Bare metal may rust.



SAFETY INSTRUCTIONS



FAILURE TO FOLLOW THESE SAFETY INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR PROPERTY DAMAGE AND WILL VOID THE WARRANTY. The owner must ensure that all players know and follow these rules to safely operate the system. Proper and complete assembly, use and supervision is essential for proper operation and to reduce the risk of accident or injury. A high probability of serious injury exists if this system is not installed, maintained, or operated properly.

- If using a ladder during assembly, use extreme caution. Follow all warnings and cautions on the ladder carefully.
- 6 people are required to lift the unit into place.
- Before digging, contact the appropriate agency to locate underground power cables, gas, and water lines. Do not install the system within 20 feet of overhead power lines.
- Climate, corrosion, or misuse could result in system failure.
- If technical assistance is required, contact the manufacturer.
- Minimum operational height is 7'6" to the Rim. Most injuries are caused by misuse and /or failure to follow instructions. Use caution when using the system.

Required For This Page:

Shovel, Concrete, Rebar and Tape Measure

****ONLY MINIMUM OF TWO ADULT IS REQUIRED FOR THE FOLLOWING STEPS****

STEP A

NOTE: Before digging, call to locate any buried utility lines.

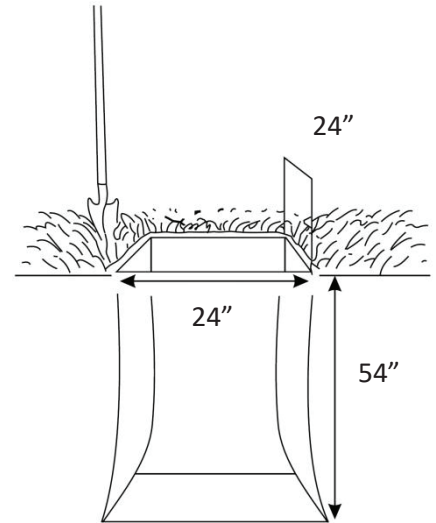
- Dig a hole 54" deep and 36"x 36" square. The edge of the hole should be flush with the edge of the playing surface. If you live in an area where heavy frost can occur, it may pose a problem, consult your local building inspector to determine the appropriate hole depth.

NOTE: The hole must be at least 54" deep.

- Build a form before pouring the concrete pad, to ensure that the top of the concrete remains straight and square. The form should be placed about 1/2" above the playing surface to allow for water drainage.
- Bell out the bottom of the hole. And place the foundation using crush stone, concrete pad or bricks that is 6 inches tall.

NOTE: A square hole prevents the rotation of the concrete.

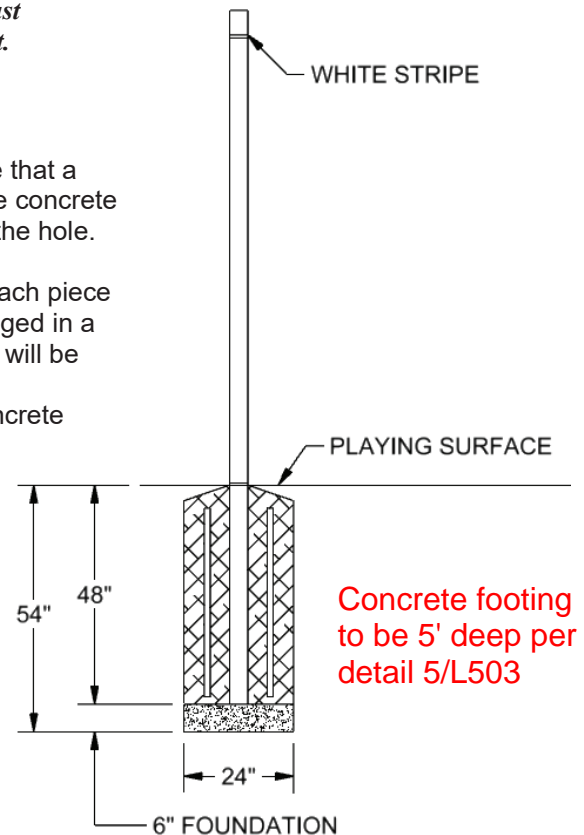
NOTE: The area behind the playing surface must be cleared off by at least 3 feet to enable the user to stand behind the pole to adjust the Rim height.



STEP B

- Mix the concrete according to the instructions on the bags. Note that a thicker mix of concrete will dry stronger than a thin mix. Pour the concrete into the hole, stopping approximately 18 inches from the top of the hole.
- Insert the basketball post 48 inches from the playing surface
- Insert the four pieces of 3/4" x 42" Rebar into the hole, pushing each piece firmly to the bottom of the hole. The four pieces should be arranged in a square approximately 8 inches wide so that each piece of rebar will be positioned surrounding the backstop post.
- Finish filling the hole to the top with concrete. The top of the concrete should reach just above the level of the top of the form.

YOU ARE NOW FINISHED WITH THE INITIAL ASSEMBLY STEPS. DO NOT PROCEED WITH THE ASSEMBLY UNTIL THE CONCRETE HAS FULLY CURED. CURING WILL TAKE A MINIMUM OF 72 HOURS. IN HUMID CLIMATES OR WET WEATHER, ALLOW ADDITIONAL TIME FOR THE CONCRETE TO CURE.

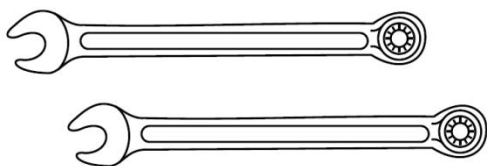


WARNING



NEVER USE THE SYSTEM WITHOUT FOLLOWING THE CEMENTING INSTRUCTIONS. FAILURE TO FOLLOW ALL OF THESE INSTRUCTIONS AND WARNINGS COULD LEAD TO SERIOUS PERSONAL INJURY OR PROPERTY DAMAGE AS LISTED ON PAGE ONE.

Required For This Page:



- HEX HEAD BOLT APPROXIMATELY 6" - 7" LONG WITH WASHERS, LOCK WASHERS AND HEX NUT. (SET OF 6)
- BACK POST PLATE
- EXTENSION ARM WELDMENT
- HEX HEAD BOLT APPROXIMATELY 3" LONG WITH WASHERS, LOCK WASHERS AND TWO HEX NUT. (SET OF 4)



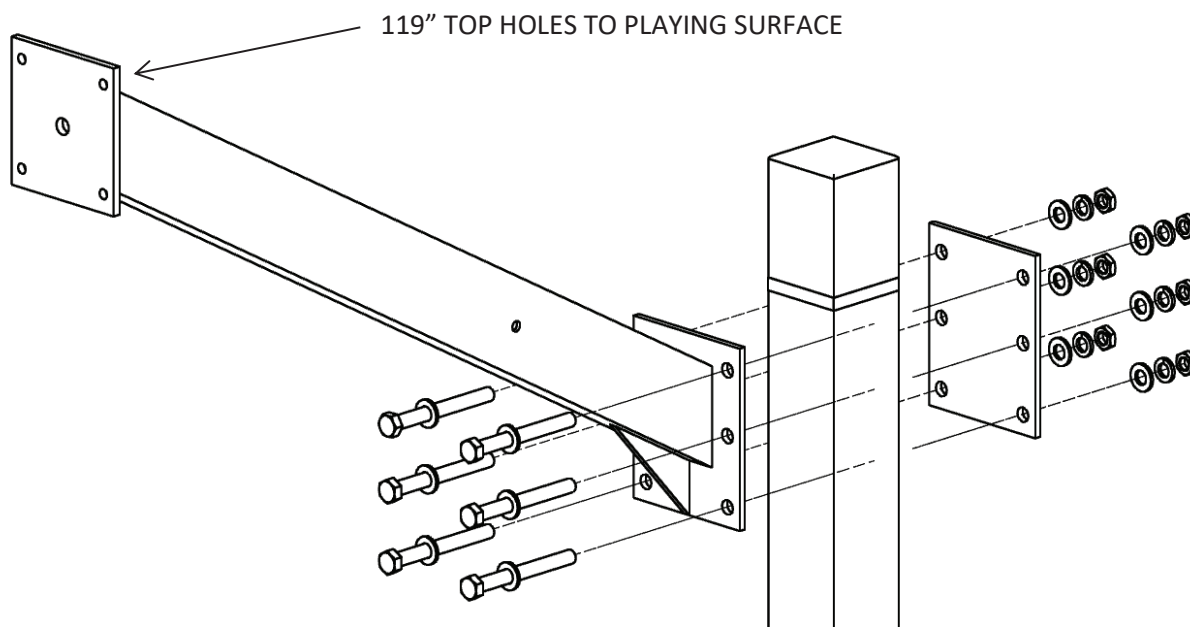
WARNING



BECAUSE OF THE SIZE AND WEIGHT OF THE SYSTEM, A MINIMUM OF THREE ADULTS ARE REQUIRED FOR THE FOLLOWING STEPS

STEP 1

- Position the extension arm and back post plate to the post near the white stripe.
- Using the longest hex head bolt to tie the two item mention above using the hardware as shown below. **DO NOT OVER TIGHTEN!**
- Set the top holes in the plate to 119 inch to the playing surface.



STEP 2

- Assemble the 5 inch by 5 inch hole pattern backboard to extension arm weldment 5 inch by 5 inch hole pattern.
- Using the 4 sets of hex head bolt that fits the 5 inch by 5 inch hole pattern. Order of main part is rim, gasket, backboard and extension arm weldment, tie four items using the hex head bolt with washer thru rim and gasket. Into the backboard nut in the 5 inch by 5 inch hole pattern, use a hex nut to hold the rim and gasket to the backboard. Then lift the backboard on to the extension arm weldment 5 inch by 5 inch hole pattern. Finish this off with washers, lock washers and hex next, repeat till all four set of hardware is securely on (see figure 1&2).

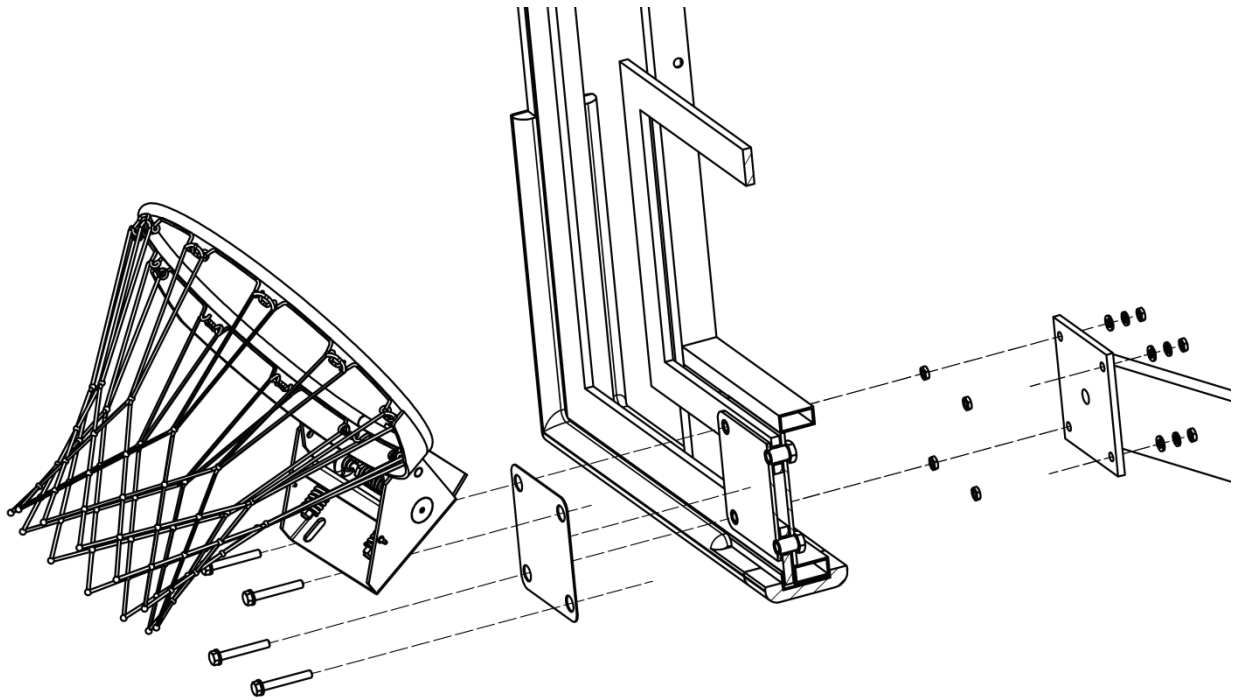


Figure 1 (Rectangular Backboard)

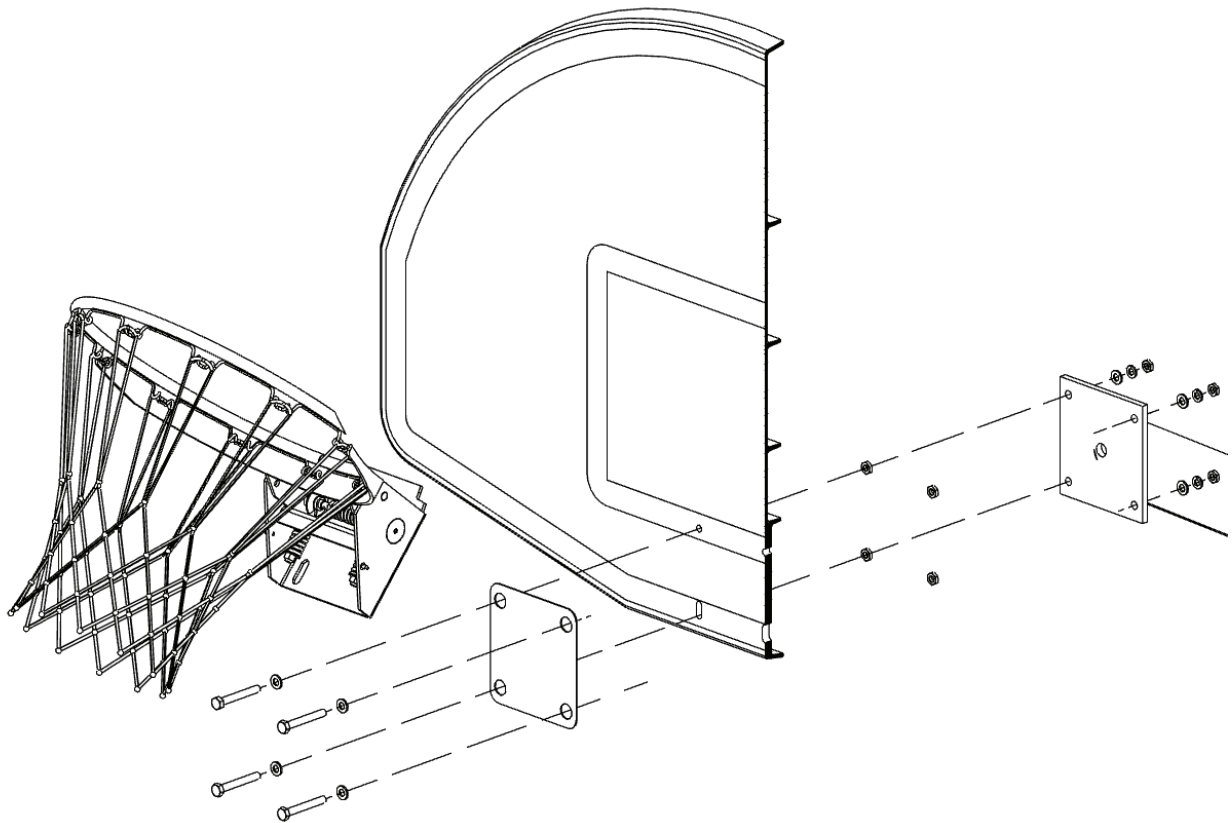


Figure 2 (Fan Backboard)

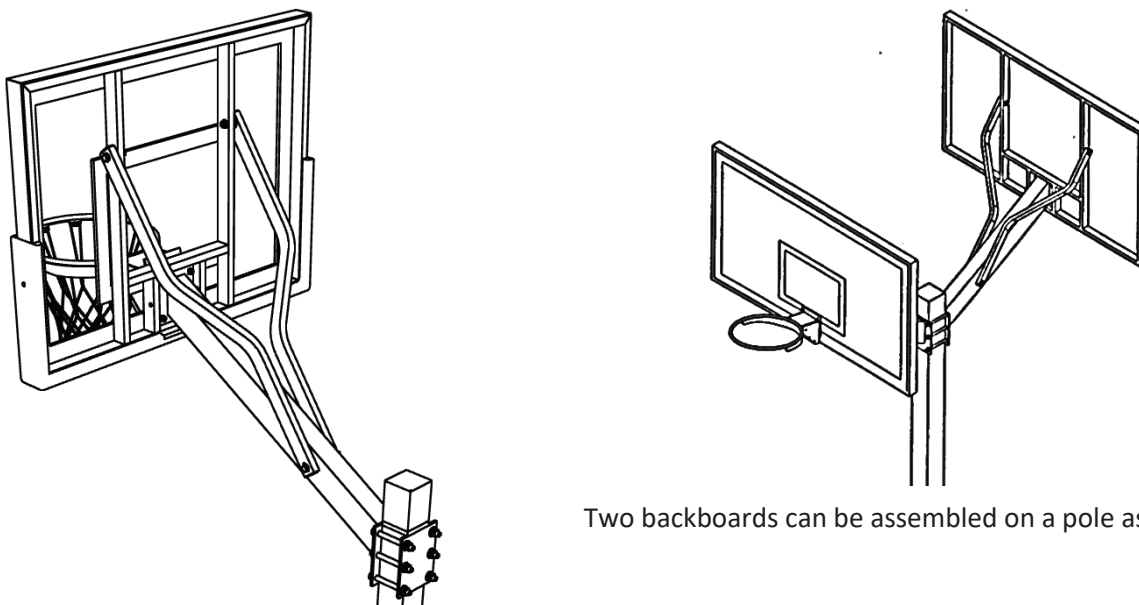
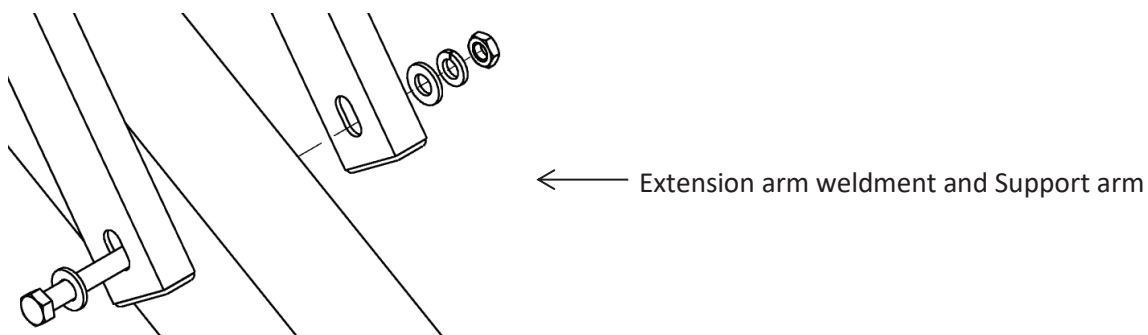
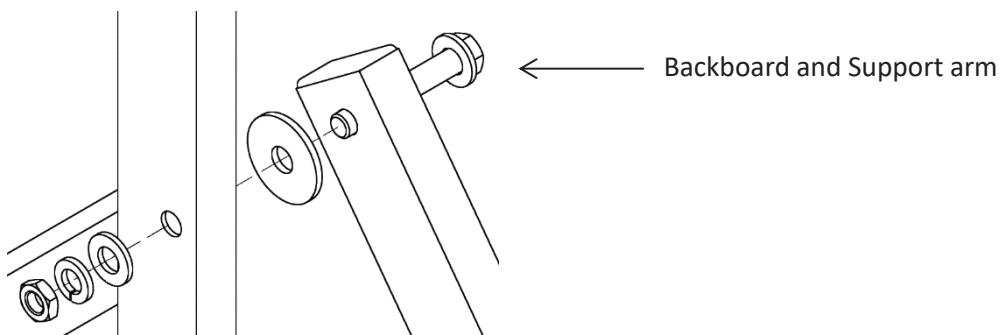
Required For This Page: (Optional For Rectangular Backboard)



- HEX HEAD BOLT APPROXIMATELY 6" LONG WITH WASHERS, LOCK WASHERS AND HEX NUT. (SET OF 1)
- SUPPORT ARMS (SET OF 2)
- HEX HEAD BOLT APPROXIMATELY 3" LONG WITH TWO WASHERS, BLACK FENDER WASHER AND LOCK NUT. (SET OF 4)

STEP 3 (Optional For Rectangular Backboard) Note: The Fan Shape Backboard does not require braces.

- a. Assemble support arms to extension arm weldment. Note slots in support arms goes on the extension arm weldment and holes on the other end goes for the backboard hardware.



Two backboards can be assembled on a pole as shown.



Communication Board

✓	✗	👤	➡	👤	👤	👤	👤	👤	👤
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A	B	C	D	E	F	G	H	I	J
K	L	M	N	O	P	Q	R	S	T
U	V	W	X	Y	Z				

REPRESENTATIVE
IMAGE OF
NON-VERBAL
COMMUNICATION
SIGN BOARD. FINAL
PRODUCT TBD.

BID FORM

For: **Stratton School, Bishop School and Peirce School Playgrounds**

Proposal (BID) of _____

(hereinafter called "Bidder") a corporation, organized and existing under the laws of the
Commonwealth of Massachusetts.

doing business as: _____
(corporation, proprietorship, partnership)

to the TOWN OF ARLINGTON hereinafter called "Owner".

- A. The Bidder, in compliance with your invitation for bids for the Stratton School, Bishop School and Peirce School Playgrounds, Arlington Massachusetts, having examined the plan and specifications with related documents and the site of the proposed project including the availability of materials and labor, hereby proposes to furnish all labor, materials and supplies, and to construct the project in accordance with the Contract Documents, within the time set forth therein, and at the prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this proposal is a part.

Bidder hereby agrees to commence work under this Contract on or before a date to be specified in the written "Notice to Proceed" from the Owner, and to complete the work by **November 1, 2022**. The Bidder further agrees to pay as liquidated damages, the sum of \$100.00 for each consecutive calendar day thereafter that the works remains incomplete, as provided in the Instruction to Bidders, Modifications to General Conditions. Required completion dates are as follows:

- B. Bidder agrees to perform all work described in the specifications and shown on the drawings, for the following lump sum price of:

1. Total Proposed Base Bid Contract Price:

_____ Dollars (\$_____)

The form of _____ is submitted herewith in accordance with the INSTRUCTION FOR BIDDERS and is to become property of the Owner in the event the Contract and bonds are not executed within the time above set forth, as liquidated damages for the delay and additional expense to the Owner caused thereby.

2. The Bid does not include premiums on Performance/Labor and Materials Bond. Cost of required Bond Premiums:

Bid Premiums Add \$ _____

3. In addition to the Base Bid work, the Bidder proposes the following prices for the Deduct Alternate items, as described on the plans and in Specification Section 01 23 00, ALTERNATES.

- a. Total Bid for Alternative #1:

_____ Dollars (\$_____)

b. Total Bid for Alternative #2:

_____ Dollars (\$_____)

c. Total Bid for Alternative #3:

_____ Dollars (\$_____)

d. Total Bid for Alternative #4:

_____ Dollars (\$_____)

ADDENDUM NO.1

4. The Supplemental Unit Prices set forth herein shall be used to determine any equitable adjustment of the Contract in connection with the changes or extra work performed under this Contract as directed by the **Town of Arlington**.

It is mutually understood and agreed that such Supplemental Unit Prices include all items of costs, equipment, taxes, and insurance of every kind, overhead, and profit for the **Contractor** and they shall be used uniformly, without modification for addition and deductions. Prices listed under ADDITIONS and DEDUCTIONS are to be the complete total price billed to and paid by the **Town of Arlington** therefor. There can be no more than fifteen (15) percent difference in price between the additions and deductions.

SUPPLEMENTAL UNIT PRICES FORM				
ITEM DESCRIPTION (All references to items shall correspond to work as described in the relevant portions of the Construction Documents.)		UNIT	COST	APPROVED
1	Construction fencing	LF	\$	
8	Ordinary borrow/clean fill, complete in place	CY	\$	
3	Gravel borrow, complete in place	CY	\$	
4	Base drainage stone for poured in place rubber, in place	CY	\$	
5	Dense graded gravel, complete in place	CY	\$	
6	3/4" Crushed stone/drainage stone, complete in place	CY	\$	
7	Clean screened loam, complete in place	CY	\$	
8	Asphalt walk paving, per detail and specification	SF	\$	
9	Vehicular asphalt paving			
10	4" reinforced concrete paving, complete in place including base and subbase preparation & broom finish	SF	\$	
11	Poured-in-place rubber surfacing installed per detail and specification	SF	\$	
12	Lawn seed & loam, per detail and specification	SF	\$	

- C. If the Bid is accepted by the Owner, the undersigned agrees to complete the entire work provided to be done under the contract within the time stipulated by the Owner.
- D. The undersigned agrees that for extra work, if any, performed in accordance with the AGREEMENT, he will accept compensation as stipulated therein in full payment for such extra work.
- E. Bidder understands that the Owner reserves the right to reject any and all bids.
- F. The undersigned hereby agrees that he will not withdraw the Bid within sixty (60) consecutive calendar days after the actual date of the opening of Bids and that, if the Owner accepts this Bid, the undersigned will duly execute and acknowledge the required Contract Bonds within 10 days after notification that the AGREEMENT is ready for signature.
- G. Should the undersigned fail to fulfill any of his agreements as here in before set forth, the Owner shall have the right to retain as liquidated damages the amount of the Bid security, which shall become the Owner/s property. If a bid was furnished as bid security, it is agreed that the amount thereof shall be paid as liquidated damages to the Owner by the Surety.
- H. The Undersigned certifies under penalty of perjury that this Bid is in all respect bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the "person" shall mean natural person, joint venture, partnership, corporation or other business or legal entity.
- I. The undersigned certifies that he is able to furnish labor that can work in harmony with all with all laws and regulations applicable to awards made subject forty-four A.
- a. Have been in business under the present name for _____ years.
- b. Ever failed to complete any work awarded? _____ (Yes), _____ (No)
If yes, explain: _____
- c. Bank Reference: _____
- J. The Bidder is required to state below all work he/she and his/her subcontractors (if subcontractors are to perform substantial portions of the work) has complete within the past five (5) years of a similar character and value to that of the work included in the proposed Contract and to give references that will enable the Owners to judge the Bidder's experience, skill and business standing. The Bidder is required to list a minimum of three (3) completed projects that are comparable in scope, complexity, and value. For each project, include the name, location, type, date complete, construction value and owner contact.

(Add supplementary page if necessary)

- K. The Bidder is required to state below all construction projects he/she currently has under contract. For each project, include the name, location, type, scheduled completion date, construction value and owner contact.

- L. The undersigned further certifies under the penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth of Massachusetts under the provisions of section 29F, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation declared there under.

- M. The undersigned bidder hereby certifies he/she will comply with the minority workforce percentage ratio and specific affirmative action steps contained in the EEO/AA provisions of the Contract, including compliance with Minority/Women Business Enterprise as required under these contract provisions. The contractor receiving the award of the Contract shall be required to obtain from each of its subcontractors a copy of its bidder's certification and submit it to the contracting agency prior to the award of such subcontract, regardless of tier, that it will comply with the minority workforce ratio and specific affirmative action steps contained in these EEO/AA contract provisions.

Date: _____

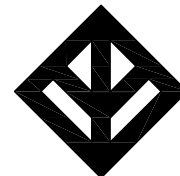
Name of General Bidder

By:

Name and Title of Person

Signing Bond Business

Address



WARNER LARSON
LANDSCAPE ARCHITECTS
130 WEST BROADWAY, BOSTON MA 02127
617.464.1440 warnerlarson.com

STRATTON SCHOOL, BISHOP SCHOOL, AND PEIRCE SCHOOL PLAYGROUNDS

ARLINGTON
MASSACHUSETTS

PREPARED FOR:

TOWN OF ARLINGTON

STRATTON SCHOOL
180 MOUNTAIN AVE,
ARLINGTON, MA 02474

BISHOP SCHOOL
25 COLUMBIA ROAD,
ARLINGTON, MA 02474

PEIRCE SCHOOL
85 PARK AVENUE EXTENSION,
ARLINGTON, MA 02474

BID DOCUMENTS

REVISIONS

NO.	DATE	DESCRIPTION
A1	5/3/22	ADDENDUM #1

DATE: 2022-04-20

SCALE: 1"=10'-0"

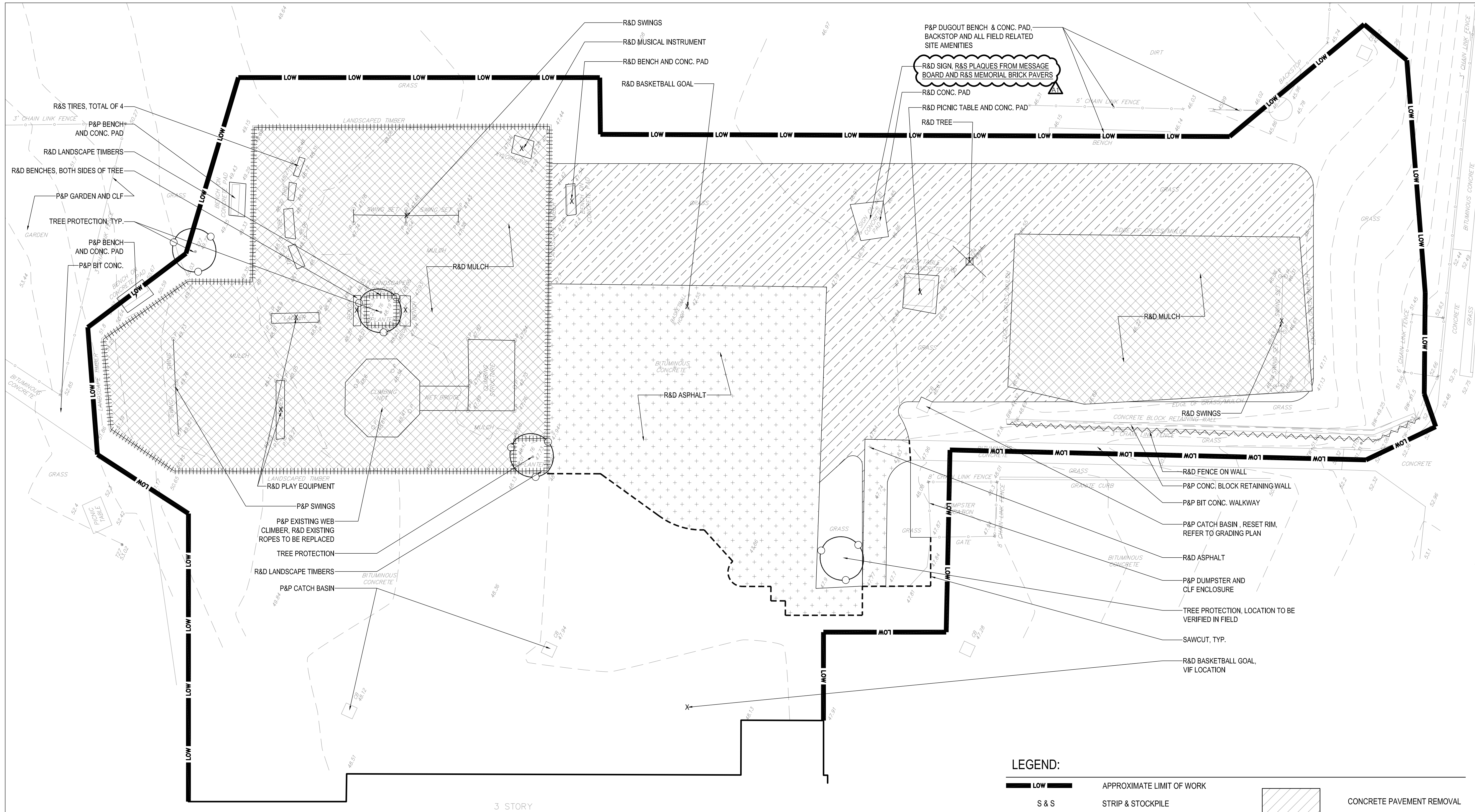
JOB #: 22201

DRAWN BY: EH/AA

CHECKED BY: DW

BISHOP - SITE PREP

L101



SITE PREPARATION NOTES:

- EXISTING CONDITIONS INFORMATION IS FROM A SURVEY PERFORMED BY ROBER SURVEY, ARLINGTON, MA, ON FEBRUARY 9, 2022.
- CONTRACTOR SHALL REMOVE ALL EXISTING STRUCTURES, FOOTINGS, PAVEMENT, WALKS, WALLS, STAIRS, TREES, SHRUBS, ETC. NECESSARY TO COMPLETE THE WORK UNDER THIS CONTRACT. ALL ITEMS, INCLUDING BUT NOT LIMITED TO: STRUCTURES AND RELATED FOOTINGS, SITE AMENITIES, FENCES AND FENCE FOOTINGS LOCATED WITHIN THE LIMIT OF WORK LINE SHALL BE REMOVED AND LEGALLY DISPOSED OF UNLESS NOTED OTHERWISE.
- ITEMS TO BE SALVAGED SHALL BE STORED ON-SITE WITHIN CONSTRUCTION FENCING AND SHALL BE PROTECTED FROM DAMAGE DURING CONSTRUCTION.
- SALVAGE ALL SITE SIGNAGE REQUIRED TO BE REMOVED BY THE WORK OF THIS PROJECT, AND PROVIDE TO OWNER'S REPRESENTATIVE. DISPOSE OF FOOTINGS AND DAMAGED POSTS. REINSTALL SALVAGED SIGNS WHERE DIRECTED BY THE LANDSCAPE ARCHITECT IN THE FIELD USING NEW APPROVED FENCE-MOUNTING HARDWARE, AND POSTS WHERE REQUIRED.
- EXISTING FOUNDATIONS AND BELOW GRADE REMAINS OF THE FORMER FOOTINGS SHALL BE REMOVED TO ACCOMMODATE THE PROPOSED IMPROVEMENTS AND FINISH GRADES. ABANDON-IN-PLACE ANY FOUNDATIONS IF ENTIRE REMOVAL IS UNNECESSARY FOR THE PROPOSED IMPROVEMENTS.
- CONTRACTOR SHALL NOTIFY DIGSAFE (1-888-DIG-SAFE) AND VERIFY UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED TO ROADS, WALKS, UTILITIES, SITE IMPROVEMENTS, EXISTING OR PROPOSED, DAMAGED BY THIS PROJECT.
- CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT PRIOR TO STARTING WORK.
- ALL WORK SHALL COMPLY WITH ALL LOCAL AND STATE REGULATORY AGENCIES' REQUIREMENTS.
- CONTRACTOR SHALL PROTECT ALL TREES TO REMAIN WITHIN THE LIMIT OF WORK.
- STRIP AND STOCKPILE ALL TOPSOIL ON SITE FOR AMENDMENT AND REUSE. ASSUME 6" OF TOPSOIL IS AVAILABLE FOR HARVESTING AT MAINTAINED LANDSCAPE AREAS.
- FURNISH AND INSTALL TEMPORARY CONSTRUCTION FENCING TO SECURE LIMIT OF WORK AREAS AND STORED MATERIALS AND EQUIPMENT FROM UNAUTHORIZED ACCESS.
- ALL EXPOSED AREAS TO HAVE EROSION CONTROL PROTECTION PER SPECIFICATION.
- ALL STOCKPILED SOIL TO BE COVERED.
- CONTRACTOR TO MAINTAIN EMERGENCY EGRESS FROM ALL EXTERIOR DOORS.

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ARLINGTON
MASSACHUSETTS

TOWN OF ARLINGTON

BISHOP SCHOOL
25 COLUMBIA ROAD,
ARLINGTON, MA 02474

PEIRCE SCHOOL
85 PARK AVENUE EXTENSION,
ARLINGTON, MA 02474

REVISIONS

[illegible]

DATE: 2022-04-20

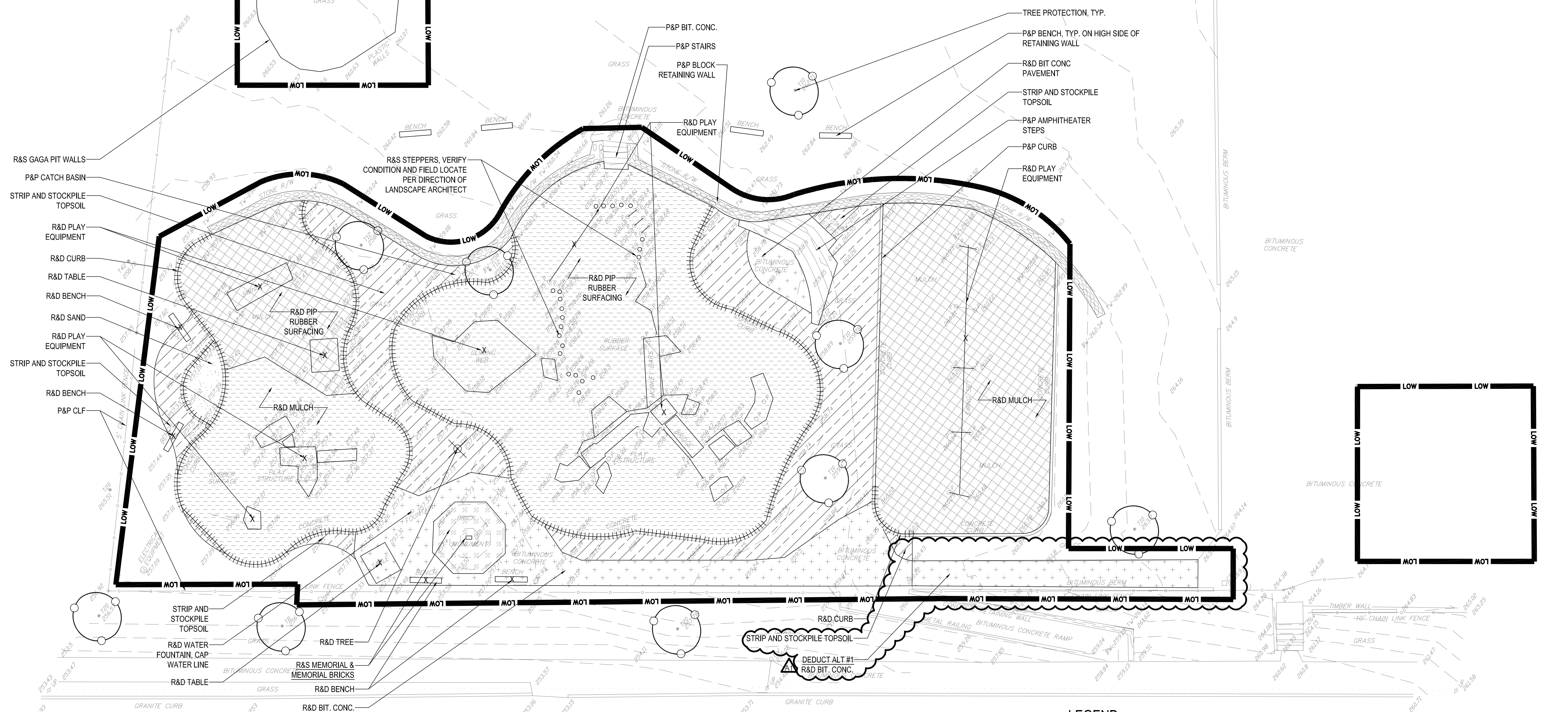
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JOB #: 22201

DRAWN BY: EH/AA

CHECKED BY: DW


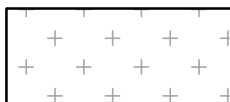



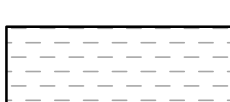

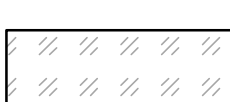
L103

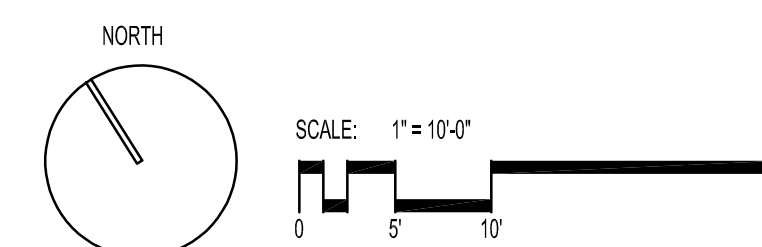


SITE PREPARATION NOTES:

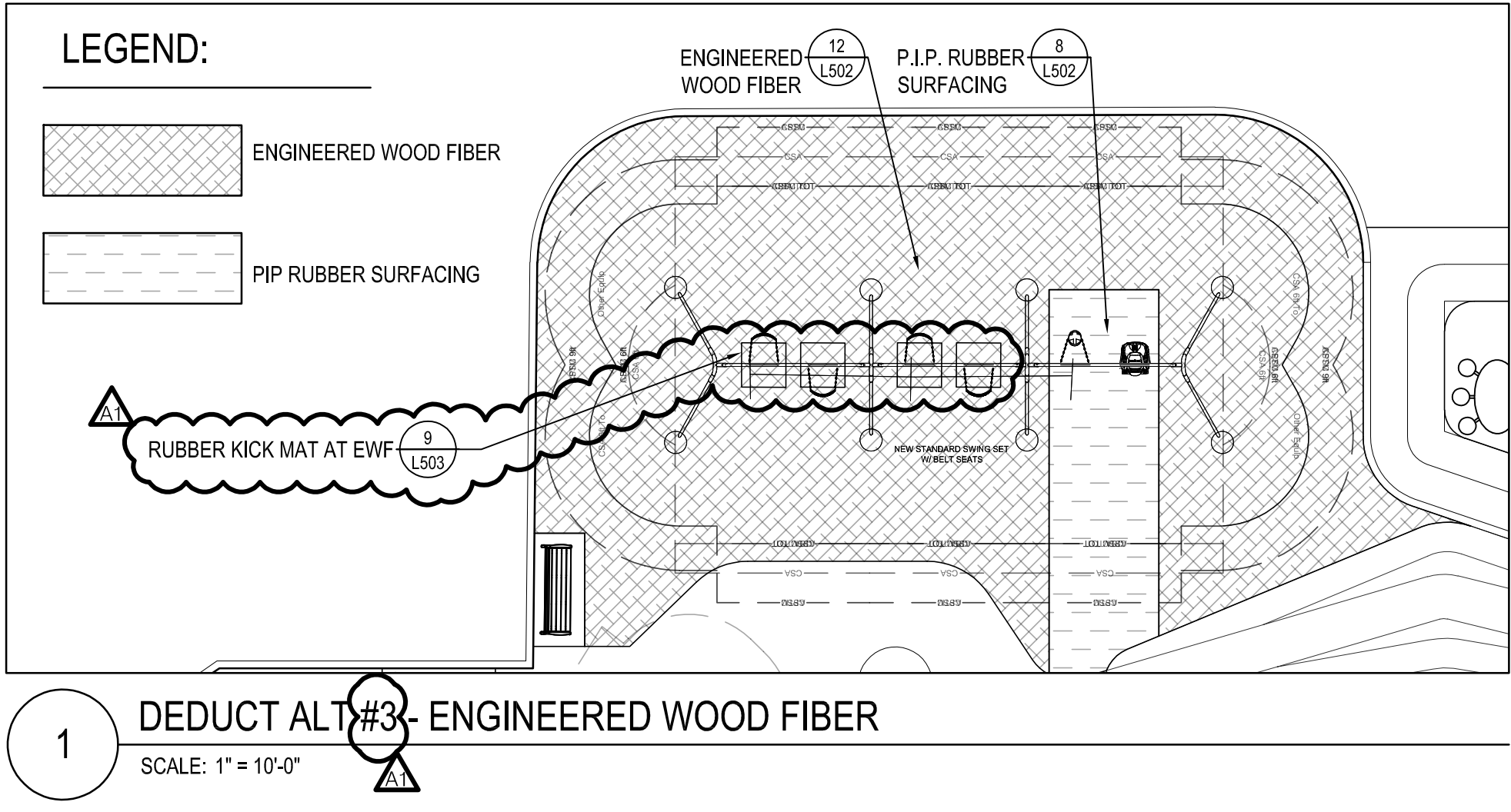
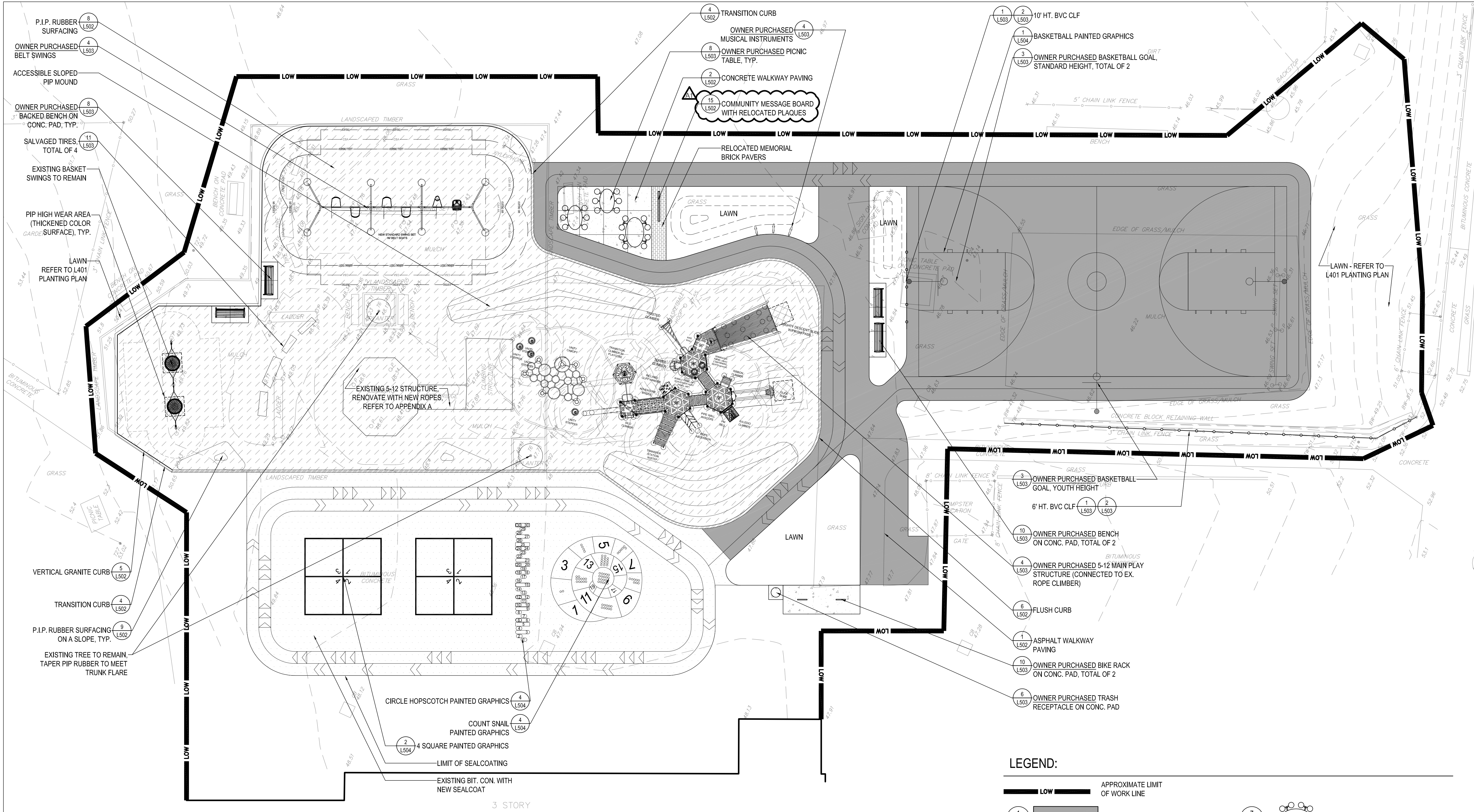
1. EXISTING CONDITIONS INFORMATION IS FROM A SURVEY PERFORMED BY ROBER SURVEY, ARLINGTON, MA, ON JANUARY 26, 2022.
2. CONTRACTOR SHALL REMOVE ALL EXISTING STRUCTURES, FOOTINGS, PAVEMENT, WALKS, WALLS, STAIRS, TREES, SHRUBS, ETC. NECESSARY TO COMPLETE THE WORK UNDER THIS CONTRACT. ALL ITEMS, INCLUDING BUT NOT LIMITED TO: STRUCTURES AND RELATED FOOTINGS, SITE AMENITIES, FENCES AND FENCE FOOTINGS LOCATED WITHIN THE LIMIT OF WORK LINE SHALL BE REMOVED AND LEGALLY DISPOSED OF UNLESS NOTED OTHERWISE.
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11. STRIP AND STOCKPILE ALL TOPSOIL ON SITE FOR AMENDMENT AND REUSE. ASSUME 6" OF TOPSOIL IS AVAILABLE FOR HARVESTING AT MAINTAINED LANDSCAPE AREAS.
12. FURNISH AND INSTALL TEMPORARY CONSTRUCTION FENCING TO SECURE LIMIT OF WORK AREAS AND STORED MATERIALS AND EQUIPMENT FROM UNAUTHORIZED ACCESS.
13. ALL EXPOSED AREAS TO HAVE EROSION CONTROL PROTECTION PER SPECIFICATION.
14. ALL STOCKPILED SOIL TO BE COVERED.
15. CONTRACTOR TO MAINTAIN EMERGENCY EGRESS FROM ALL EXTERIOR DOORS.

LEGEND:

LOW		APPROXIMATE LIMIT OF WORK	
S & S	STRIP & STOCKPILE		BARK CHIP MULCH SURFACING REMOVAL
P & P	PRESERVE AND PROTECT		
R & D	REMOVE AND DISPOSE		ASPHALT PAVING REMOVAL
R & S	REMOVE AND SALVAGE		
ETR	EXISTING TO REMAIN		REMOVE AND DISPOSE SAND
---	SAWCUT		
	TREE PROTECTION - ETR		CLEAR AND GRUB, STRIP TOPSOIL
+++++	REMOVE AND DISPOSE TIMBER EDGING		
~~~~~	REMOVE AND DISPOSE CHAIN LINK FENCE		REMOVE AND DISPOSE POURED IN PLACE RUBBER SURFACING
	TREE REMOVAL		REMOVE AND SALVAGE MEMORIAL BRICKS

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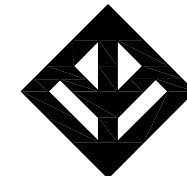
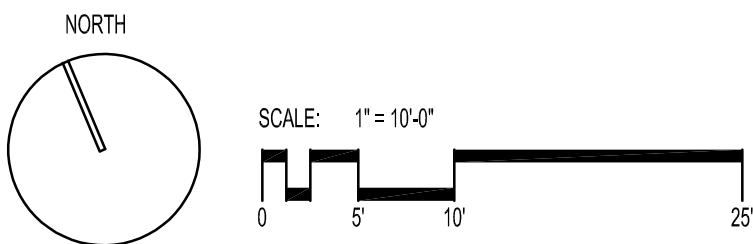


**MATERIAL NOTES:**

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- CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED TO ROADS, WALKS, UTILITIES, SITE IMPROVEMENTS, EXISTING OR PROPOSED, DAMAGED BY THIS PROJECT.
- ITEMS INDICATED AS "RELOCATED" ARE SALVAGED AND STORED FROM EXISTING SITE AND SHALL BE REINSTALLED AS PART OF THIS CONTRACT. FURNISH AND INSTALL NEW VERTICAL GRANITE CURBING SUCH AS RADIUS CORNERS, THAT ARE NOT INCLUDED IN THE SALVAGED CURBING.
- CONTRACTOR SHALL COORDINATE LOCATION OF ALL UTILITIES (LINES, DUCTS, CONDUITS, SLEEVES, FOOTINGS, ETC.) WITH LOCATIONS OF PROPOSED SITE IMPROVEMENTS (WALLS, TREE ROOTBALLS, PROPOSED LIGHTING FOOTINGS, ETC.). CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO CONTINUING WORK.
- REFER TO PLANTING PLANS FOR EXTENTS OF SAND-BASED STRUCTURAL SOILS AND AERATION PIPE LAYOUT FOR TREES IN PAVED AREAS.
- OWNER FURNISHED NON-VERBAL COMMUNICATION SIGN W/ POSTS TO BE INSTALLED BY CONTRACTOR FOLLOWING 4/L503. LOCATION TBD IN FIELD WITH LANDSCAPE ARCHITECT.

**LEGEND:**

- LOW** APPROXIMATE LIMIT OF WORK LINE
- 1 L502 ASPHALT WALKWAY PAVING
- 2 L502 CONCRETE WALKWAY PAVING
- 8 L502 P.I.P. RUBBER SURFACING, REFER TO L506 FOR COLOR LAYOUT
- 1" THICKENED PIP COLOR SURFACE IN HIGH WEAR AREAS
- EXISTING BIT. CONC. WITH NEW SEALCOAT
- 7 L503 8 SEAT CAFE TABLE
- 7 L503 6 SEAT CAFE TABLE
- 8 L503 OWNER PURCHASED BACKED BENCH
- 5 L502 VERTICAL GRANITE CURB (VGC)
- 6 L502 CAST IN PLACE CONCRETE CURB
- 1 L503 2 L503 CHAIN LINK FENCE



**WARNER LARSON**  
LANDSCAPE ARCHITECTS  
130 WEST BROADWAY, BOSTON MA 02127  
617.464.1440 warnerlarson.com

**STRATTON SCHOOL,  
BISHOP SCHOOL, AND  
PEIRCE SCHOOL  
PLAYGROUNDS**

ARLINGTON  
MASSACHUSETTS

PREPARED FOR:

TOWN OF ARLINGTON

STRATTON SCHOOL  
180 MOUNTAIN AVE,  
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BISHOP SCHOOL  
25 COLUMBIA ROAD,  
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PEIRCE SCHOOL  
85 PARK AVENUE EXTENSION,  
ARLINGTON, MA 02474

BID DOCUMENTS

**REVISIONS**

NO.	DATE	DESCRIPTION
A1	5/3/22	ADDENDUM #1

DATE: 2022-04-20

SCALE: 1"=10'-0"

JOB #: 22201

DRAWN BY: EH/AA

CHECKED BY: DW

**BISHOP -  
MATERIALS  
PLAN**

L201

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MATERIAL NOTES:

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- CONTRACTOR SHALL COORDINATE LOCATION OF ALL UTILITIES (LINES, DUCTS, CONDUITS, SLEEVES, FOOTINGS, ETC.) WITH LOCATIONS OF PROPOSED SITE IMPROVEMENTS (WALLS, TREE ROOTBALLS, PROPOSED LIGHTING FOOTINGS, ETC.). CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO CONTINUING WORK.
- REFER TO PLANTING PLANS FOR EXTENTS OF SAND-BASED STRUCTURAL SOILS AND AERATION PIPE LAYOUT FOR TREES IN PAVED AREAS.
- OWNER FURNISHED NON-VERBAL COMMUNICATION SIGN W/ POSTS TO BE INSTALLED BY CONTRACTOR FOLLOWING 4/L503. LOCATION TBD IN FIELD WITH LANDSCAPE ARCHITECT.

LEGEND:

LOW

APPROXIMATE LIMIT OF WORK LINE

1 L502

ASPHALT WALKWAY PAVING

2 L502

CONCRETE WALKWAY PAVING

8 L502

P.I.P. RUBBER SURFACING, REFER TO L506 FOR COLOR LAYOUT

10 L502

PERMEABLE CONCRETE UNIT PAVERS

EXISTING BIT. CONC. WITH NEW SEALCOAT

7 L503

8 SEAT CAFE TABLE

7 L503

6 SEAT CAFE TABLE

8 L503

OWNER PURCHASED BACKED BENCH

5 L502

VERTICAL GRANITE CURB (VGC)

6 L502

CAST IN PLACE CONCRETE CURB

14 L502

WIDE FLUSH CURB WITH FENCE

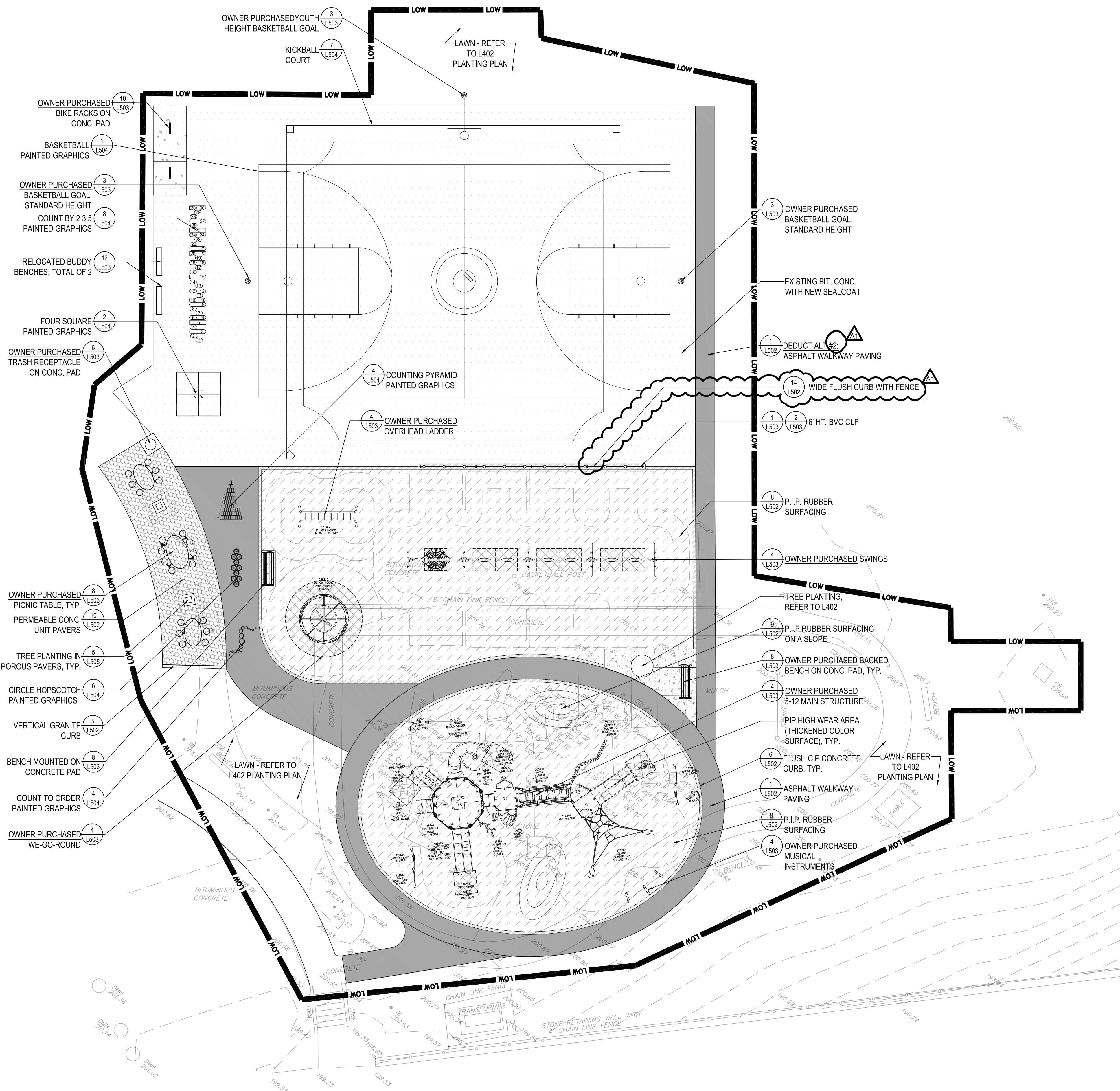
1 L503

2 L503

CHAIN LINK FENCE

NORTH

SCALE: 1"=10'-0"



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**STRATTON SCHOOL,  
BISHOP SCHOOL, AND  
PEIRCE SCHOOL  
PLAYGROUNDS**

ARLINGTON  
MASSACHUSETTS

PREPARED FOR:

TOWN OF ARLINGTON

STRATTON SCHOOL  
180 MOUNTAIN AVE,  
ARLINGTON, MA 02474

BISHOP SCHOOL  
25 COLUMBIA ROAD,  
ARLINGTON, MA 02474

PEIRCE SCHOOL  
85 PARK AVENUE EXTENSION,  
ARLINGTON, MA 02474

BID DOCUMENTS

REVISIONS

NO.	DATE	DESCRIPTION
A1	5/3/22	ADDENDUM #1

DATE: 2022-04-20

SCALE: 1"=10'-0"

JOB #: 22201

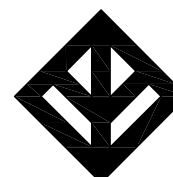
DRAWN BY: EH/AA

CHECKED BY: DW

**PEIRCE -  
MATERIALS  
PLAN**

L202





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### BID DOCUMENTS

#### REVISIONS

NO.	DATE	DESCRIPTION
A1	5/3/22	ADDENDUM #1

DATE: 2022-04-20

SCALE: 1"=10'-0"

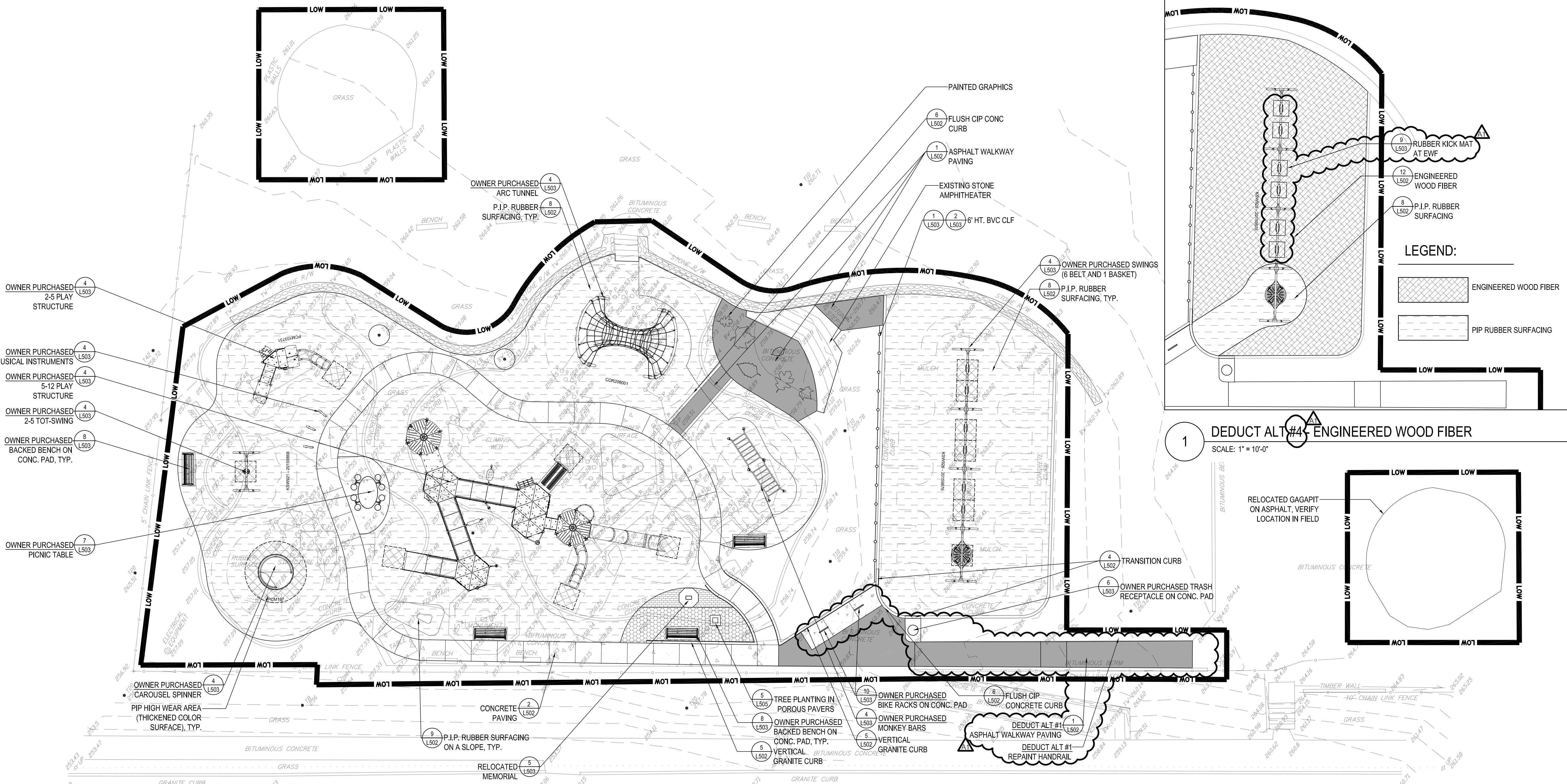
JOB #: 22201

DRAWN BY: EH/AA

CHECKED BY: DW

## STRATTON - MATERIALS PLAN

L203

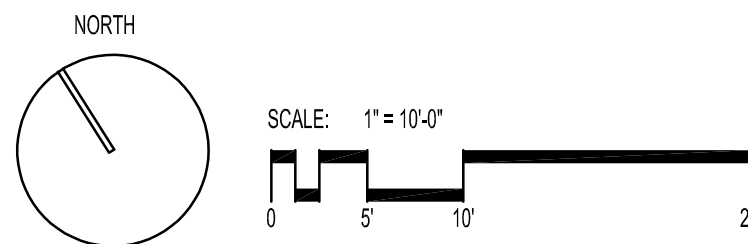


### MATERIAL NOTES:

- CONTRACTOR SHALL VERIFY ALL CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT PRIOR TO STARTING WORK.
- CONTRACTOR SHALL NOTIFY DIGSAFE 1-888-DIG-SAFE AND VERIFY UNDERGROUND UTILITIES PRIOR TO EXCAVATION.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE CAUSED TO ROADS, WALKS, UTILITIES, SITE IMPROVEMENTS, EXISTING OR PROPOSED, DAMAGED BY THIS PROJECT.
- ITEMS INDICATED AS "RELOCATED" ARE SALVAGED AND STORED FROM EXISTING SITE AND SHALL BE REINSTALLED AS PART OF THIS CONTRACT. FURNISH AND INSTALL NEW VERTICAL GRANITE CURBING SUCH AS RADIUS CORNERS, THAT ARE NOT INCLUDED IN THE SALVAGED CURBING.
- CONTRACTOR SHALL COORDINATE LOCATION OF ALL UTILITIES (LINES, DUCTS, CONDUITS, SLEEVES, FOOTINGS, ETC.) WITH LOCATIONS OF PROPOSED SITE IMPROVEMENTS (WALLS, TREE ROOTBALLS, PROPOSED LIGHTING FOOTINGS, ETC.). CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO CONTINUING WORK.
- REFER TO PLANTING PLANS FOR EXTENTS OF SAND-BASED STRUCTURAL SOILS AND AERATION PIPE LAYOUT FOR TREES IN PAVED AREAS.
- LOCATE SALVAGED STEPPERS IN FIELD WITH LANDSCAPE ARCHITECT.
- OWNER FURNISHED NON-VERBAL COMMUNICATION SIGN W/ POSTS TO BE INSTALLED BY CONTRACTOR FOLLOWING 4/L503. LOCATION TBD IN FIELD WITH LANDSCAPE ARCHITECT.

### LEGEND:

LOW		APPROXIMATE LIMIT OF WORK LINE
1 L502	ASPHALT WALKWAY PAVING	7 L503 8 SEAT CAFE TABLE
2 L502	CONCRETE WALKWAY PAVING	7 L503 6 SEAT CAFE TABLE
8 L502	P.I.P. RUBBER SURFACING, REFER TO L506 FOR COLOR LAYOUT	8 L503 OWNER PURCHASED BACKED BENCH
	1" THICKENED PIP COLOR SURFACE IN HIGH WEAR AREAS	5 L502 VERTICAL GRANITE CURB (VGC)
10 L502	PERMEABLE CONCRETE UNIT PAVERS	1 L503 2 L503 CAST IN PLACE CONCRETE CURB
		CHAIN LINK FENCE



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STRATTON  
SCHOOL,  
BISHOP  
SCHOOL, AND  
PEIRCE  
SCHOOL  
PLAYGROUNDS

ARLINGTON  
MASSACHUSETTS

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ARLINGTON, MA 02474

## BID DOCUMENTS

## REVISIONS

[illegible]

DATE: 2022-04-20

SCALE: 1"=10'-0"

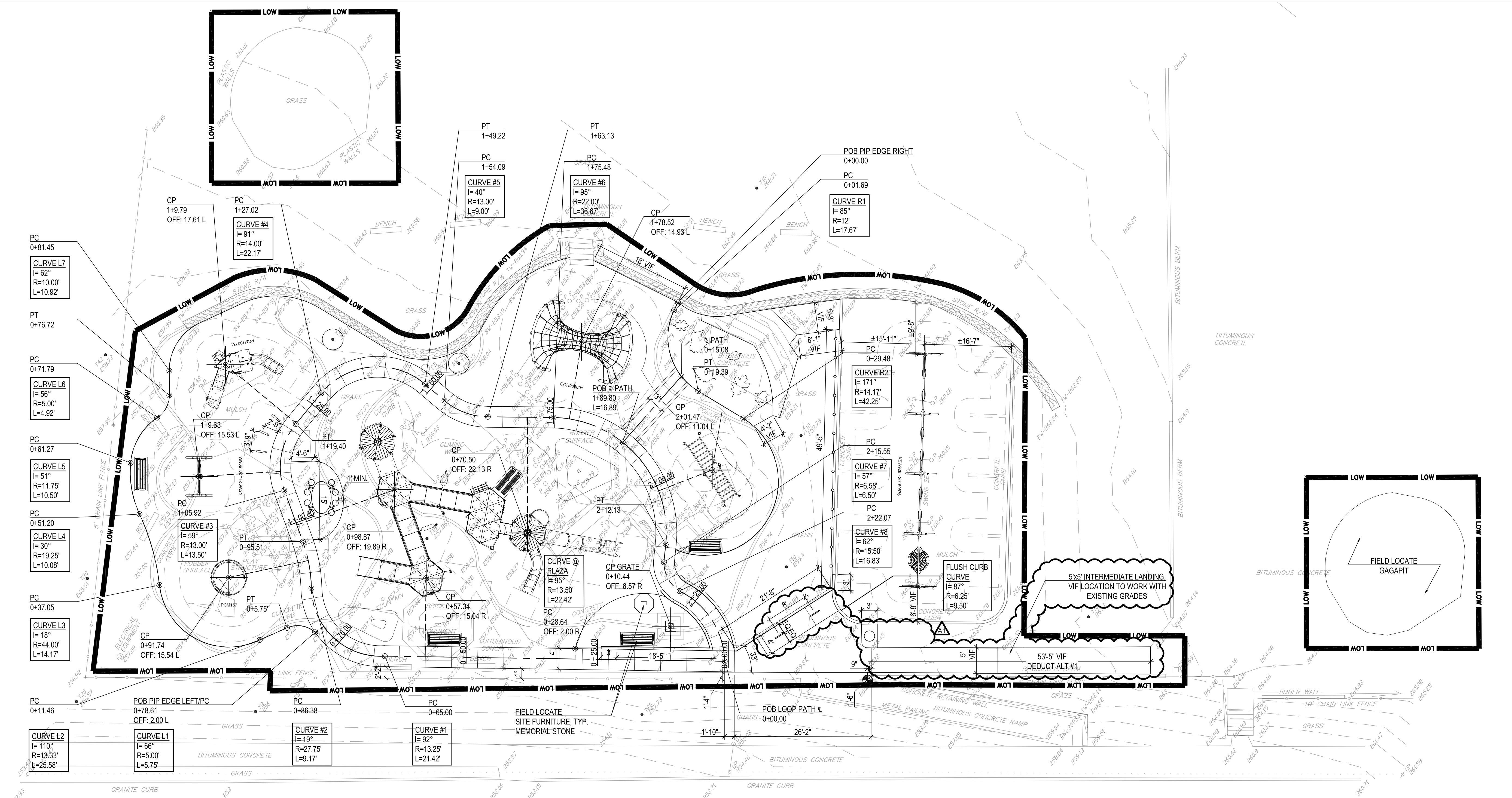
JOB #: 22201

DRAWN BY: EH/AA

CHECKED BY: DW

## STRATTON - LAYOUT PLAN







L303

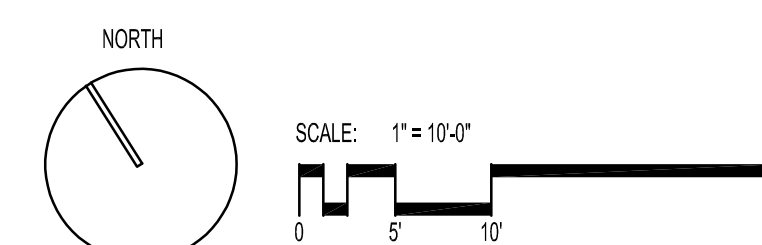


LAYOUT NOTES:

1. ALL LINES AND DIMENSIONS ARE PARALLEL OR PERPENDICULAR TO THE LINES FROM WHICH THEY ARE MEASURED UNLESS OTHERWISE NOTED.
2. THE DIMENSIONS SHOWN ON THE DRAWINGS SHOW DESIGN INTENT AND MUST BE FIELD VERIFIED PRIOR TO PREPARATION OF SHOP DRAWINGS.
3. ALL DIMENSIONS FOR LIGHTS AND SIGNS ARE TO THE CENTERLINE OF THE OBJECT UNLESS OTHERWISE NOTED.
4. PROVIDE EXPANSION JOINTS IN CONCRETE WALKS AT 30' O.C. AND CONTROL JOINTS AT 10' O.C. AS PER SPECIFICATIONS, UNLESS OTHERWISE INDICATED ON DRAWINGS.
5. ALL CURVES SHALL BE SMOOTH, CONTINUOUS RADII. NO STRAIGHT SECTIONS OR ABRUPT TRANSITIONS.
6. WHERE EDGE OF PAVEMENTS MEET WALLS, THEY SHALL ALIGN WITH FACE OF WALL TRUE PERPENDICULAR AND PARALLEL UNLESS OTHER ANGLE SHOWN.
7. CONTRACTOR SHALL STAKE OUT ALL IMPROVEMENTS TO BE APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
8. DIMENSIONS ARE TO EXPOSED FACE OF CURB UNLESS OTHERWISE NOTED.

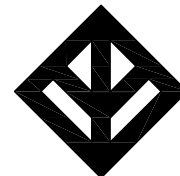
LEGEND:

 <b>LOW</b> 	APPROXIMATE LIMIT OF WORK LINE
	CENTERLINE
	ALIGN
 P.O.B.	POINT OF BEGINNING
	DIMENSION



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# STRATTON SCHOOL, BISHOP SCHOOL, AND PEIRCE SCHOOL PLAYGROUNDS

ARLINGTON  
MASSACHUSETTS

PREPARED FOR:

TOWN OF ARLINGTON

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85 PARK AVENUE EXTENSION,  
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## BID DOCUMENTS

### REVISIONS

NO.	DATE	DESCRIPTION
A1	5/3/22	ADDENDUM #1

DATE: 2022-04-20

SCALE: 1"=10'-0"

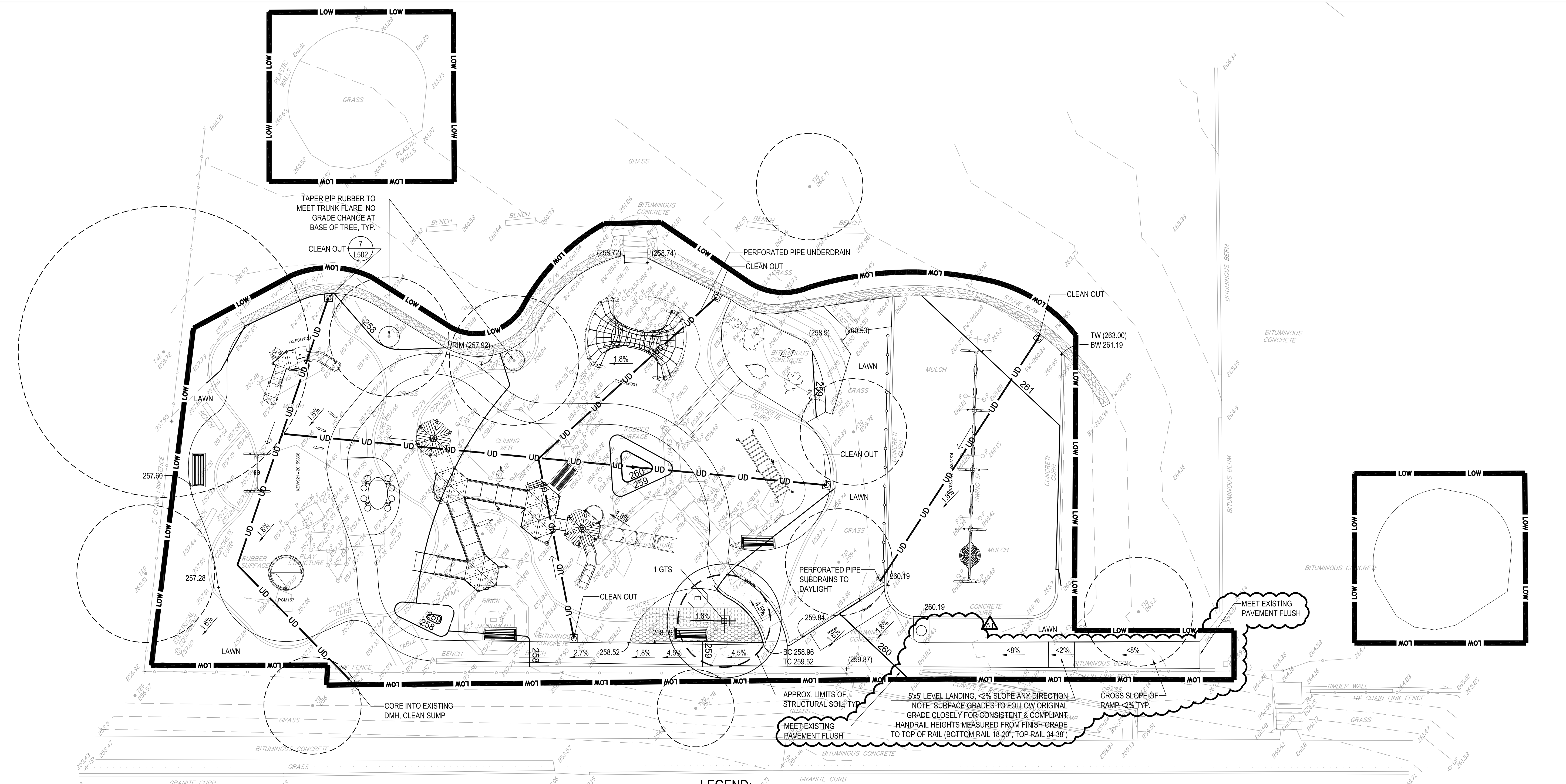
JOB #: 22201

DRAWN BY: EH/AA

CHECKED BY: DW

## STRATTON - GRADING & PLANTING

L403



### GRADING NOTES:

- CONTRACTOR SHALL STAKE OUT ALL SITE IMPROVEMENTS BOTH HORIZONTALLY AND VERTICALLY IN THE FIELD, AND SUCH STAKEOUT TO BE APPROVED BY THE ARCHITECT PRIOR TO CONSTRUCTION.
- SPOT GRADES AND CONTOURS INDICATED ON THE THIS PLAN DESCRIBE FINAL SURFACE ELEVATIONS FOR COMPLETED CONSTRUCTION.
- ALL CHANGES IN PAVEMENT MATERIALS SHALL BE FLUSH WITH EACH OTHER UNLESS OTHERWISE SHOWN.
- IF EXISTING TREE, UTILITIES OR STRUCTURES IMPEDE EXCAVATION ACTIVITIES IN ANY MANNER, CONTRACTOR SHALL INFORM THE LANDSCAPE ARCHITECT AND OWNER PRIOR TO CONTINUING WITH CONSTRUCTION ACTIVITIES.
- REGRADED SLOPES SHALL NOT EXCEED 3:1 SLOPE EXCEPT AS SHOWN ON THE PLANS
- ALL PAVED WALKWAY AREAS, PLAZAS , CROSSWALKS, HANDICAPPED PARKING SPACES, AND ASSOCIATED ACCESS AISLES AND ACCESSIBLE ROUTES SHALL BE GRADED SUCH THAT THEY ARE IN FULL COMPLIANCE WITH THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD.

### PLANTING NOTES:

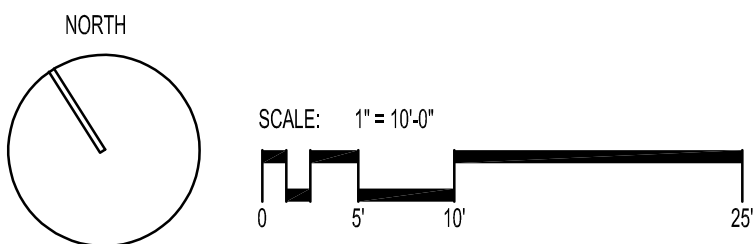
- CONTRACTOR SHALL STAKE PLANT LOCATIONS TO BE APPROVED BY THE ARCHITECT PRIOR TO INSTALLATION. FINAL LOCATIONS TO BE CONFIRMED IN FIELD.
- ALL PLANT MATERIAL AND PLANTING PROCEDURES SHALL CONFORM TO THE GUIDELINES ESTABLISHED BY THE "AMERICAN STANDARD FOR NURSERY STOCK" PUBLISHED BY THE AMERICAN NURSERYMAN'S ASSOCIATION.
- ALL PLANTS SHALL BE BALLED IN BURLAP UNLESS OTHERWISE INDICATED ON THE PLANT SCHEDULE.
- CONTRACTOR SHALL LOCATE AND VERIFY EXISTING AND NEW UNDERGROUND UTILITY LOCATIONS PRIOR TO PLANTING.
- CONTRACTOR IS RESPONSIBLE FOR FURNISHING AND SPREADING TOPSOIL (6" MINIMUM FINISHED DEPTH), FINE GRADING AND SEEDING ANY AREAS DESIGNATED ON PLAN AND ANY AREAS DISTURBED DURING THE CONSTRUCTION AND NOT OTHERWISE DEVELOPED UNDER THIS CONTRACT BOTH WITHIN AND OUTSIDE OF THE LIMIT OF WORK LINE.
- ALL PLANT BEDS SHALL RECEIVE 3" DEPTH OF PINE BARK MULCH EXCEPT AS OTHERWISE SHOWN.
- PROVIDE EROSION CONTROL MATTING AT ALL SEEDED SLOPES 3H:1V AND STEEPER AND ALONG BOTTOM OF ALL SWALES IMMEDIATELY AFTER FINE GRADING AND SEEDING.

### LEGEND:

<b>LOW</b>	APPROXIMATE LIMIT OF WORK LINE	1%	PROPOSED SLOPE	SAND BASED STRUCTURAL SOIL EXTENTS
111	EXISTING CONTOUR	TS BS	TOP OF STAIR BOTTOM OF STAIR	DECIDUOUS SHADE TREE, TYP.
53	PROPOSED CONTOUR	TW BW	TOP OF WALL BOTTOM OF WALL	EXISTING TREE TO REMAIN, TYP.
x 112.5	EXISTING SPOT ELEVATION	TC BC	TOP OF CURB BOTTOM OF CURB	LAWN
+ 50.10	PROPOSED SPOT ELEVATION	CB	CATCH BASIN	
UD	PERFORATED UNDERDRAIN	HP	HIGH POINT	

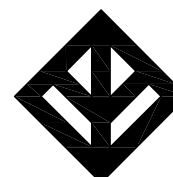
### PLANT SCHEDULE

DECIDUOUS TREES	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
GTS	1	Gleditsia triacanthos inermis 'Skycole' TM	Skyline Thornless Honey Locust	3" Cal.	



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ARLINGTON  
MASSACHUSETTS

PREPARED FOR:

TOWN OF ARLINGTON

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BID DOCUMENTS

### REVISIONS

NO.	DATE	DESCRIPTION
A1	5/3/22	ADDENDUM #1

DATE: 2022-04-20

SCALE: AS NOTED

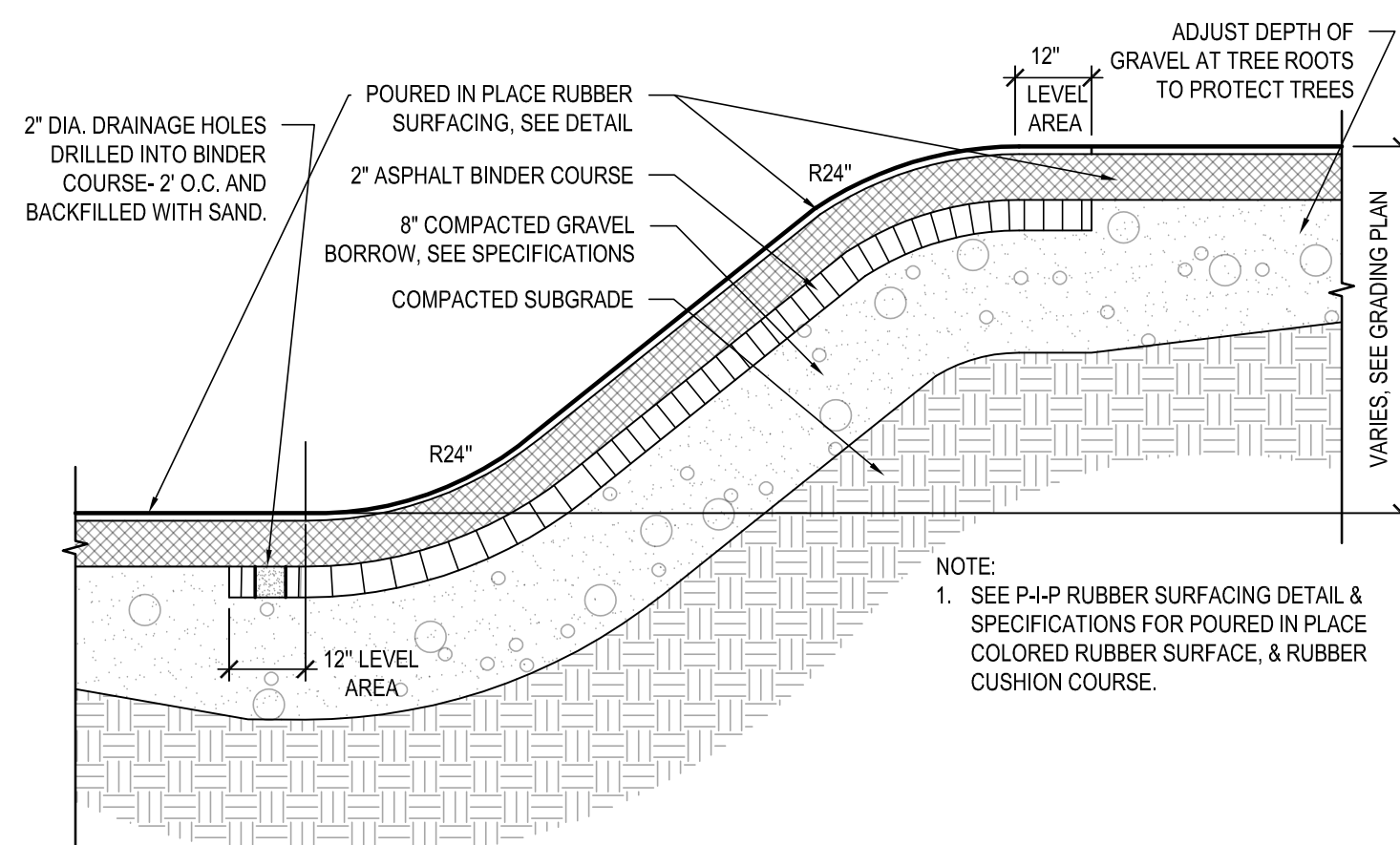
JOB #: 22201

DRAWN BY: EH/AA

CHECKED BY: DW

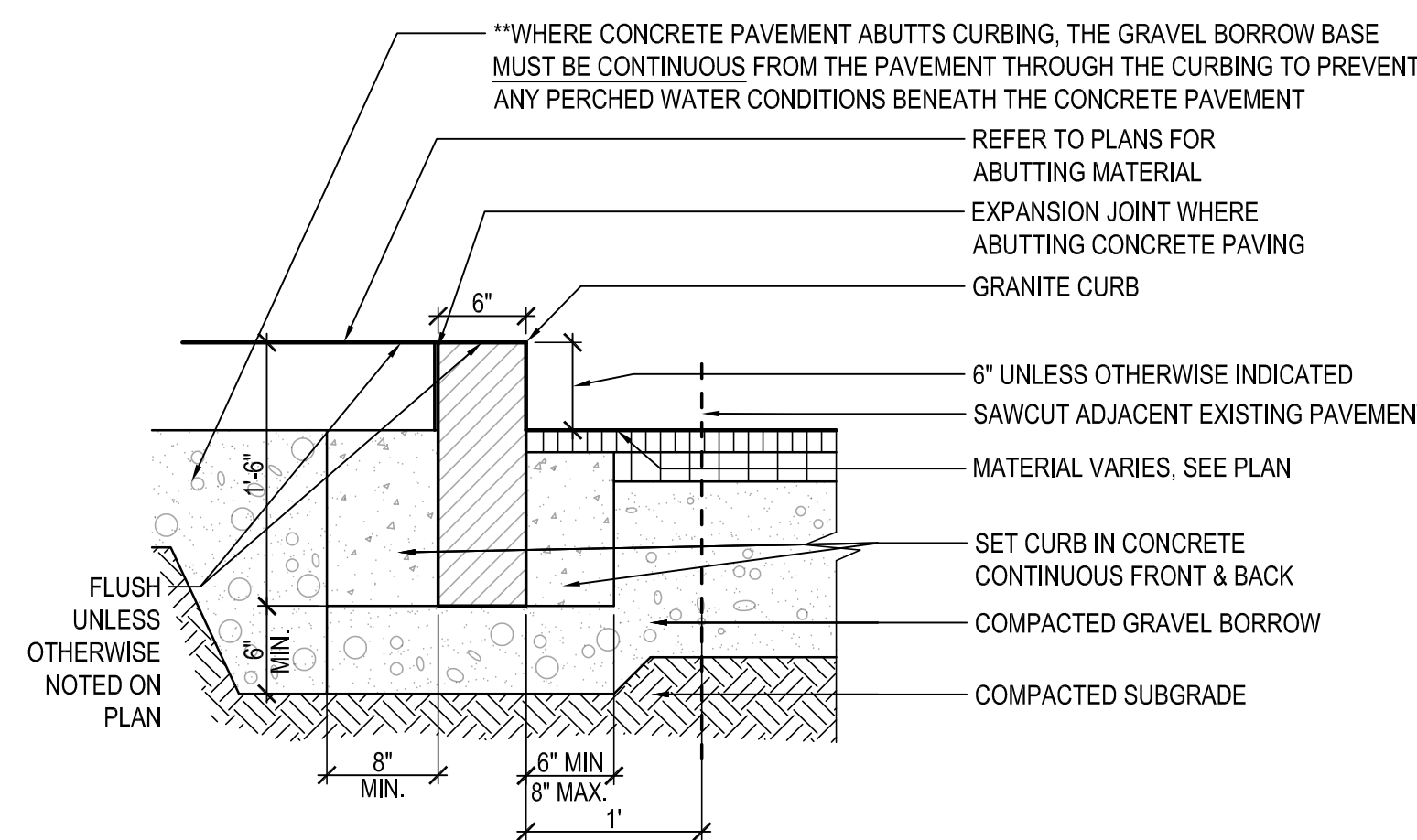
## LANDSCAPE DETAILS

L502



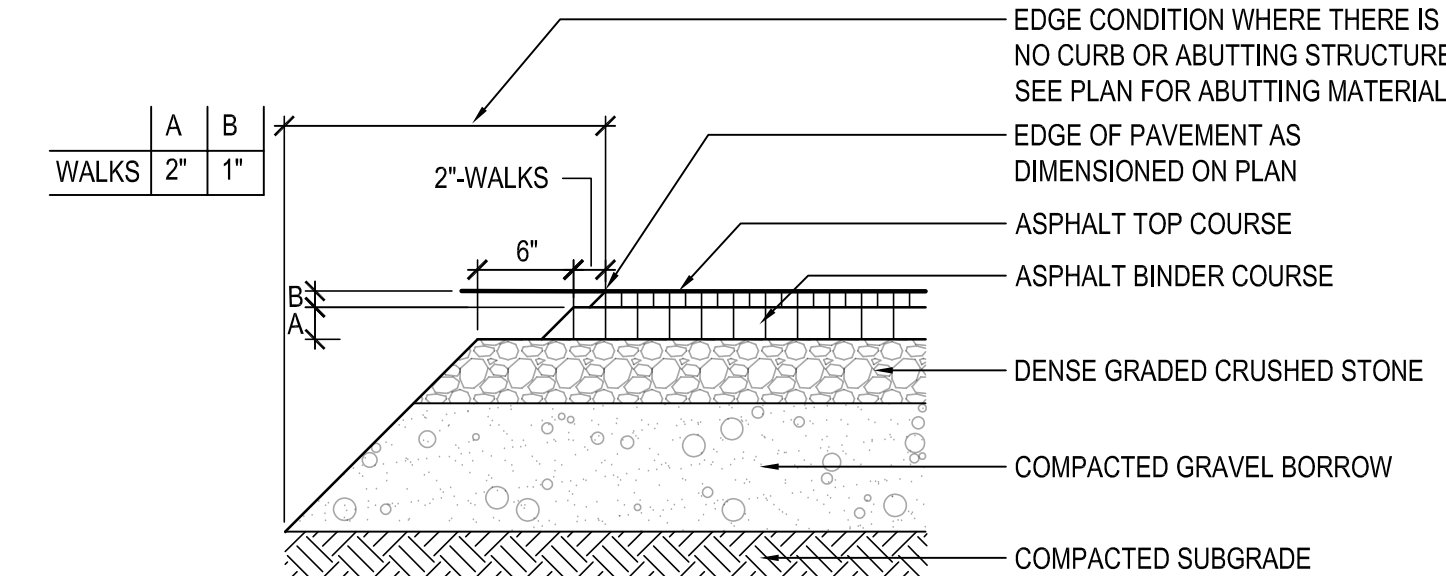
9 P.I.P. RUBBER SURFACING ON A SLOPE

SCALE: 1" = 1'-0"



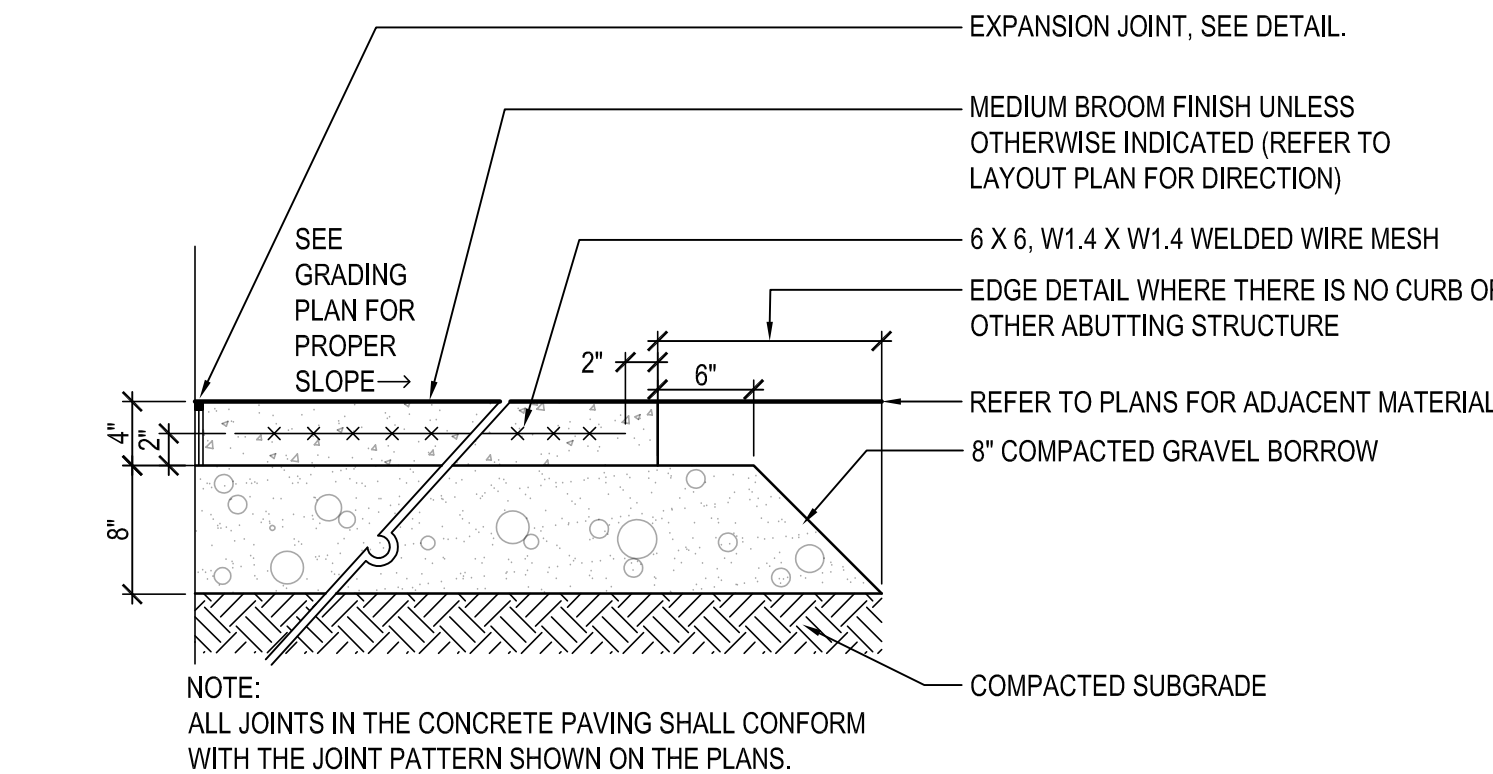
5 VERTICAL GRANITE CURB

SCALE: 1" = 1'-0"



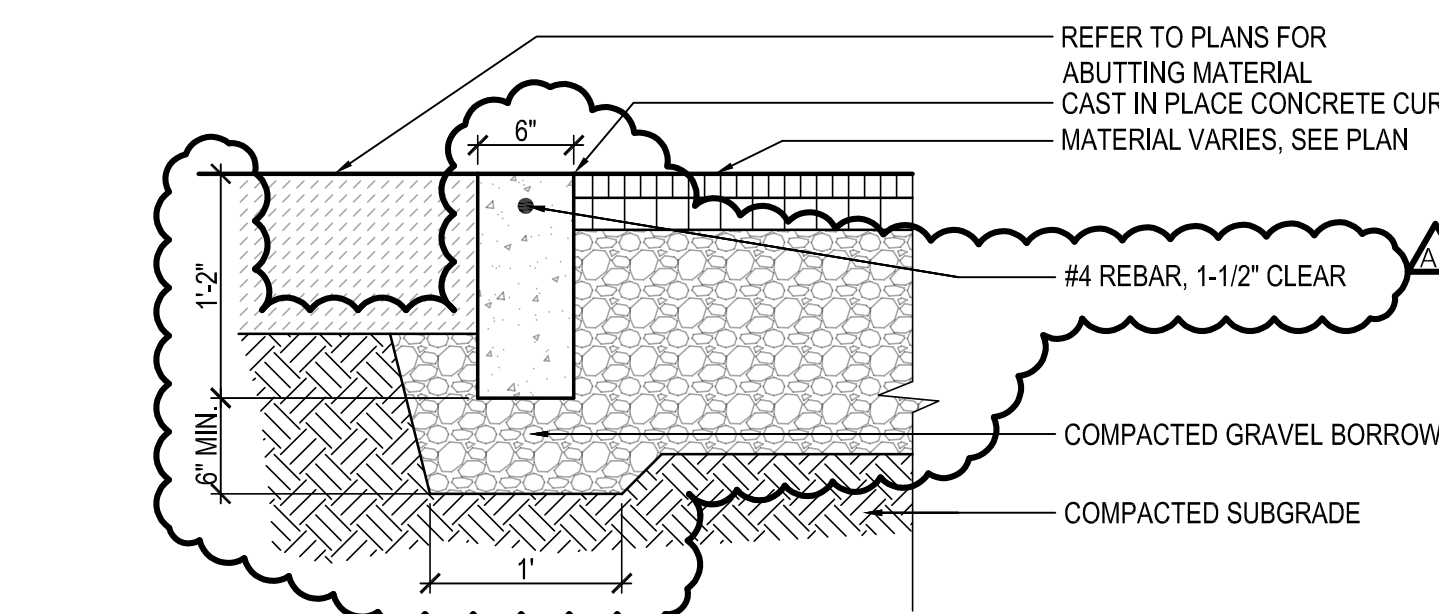
1 ASPHALT WALKWAY PAVING

SCALE: 1" = 1'-0"



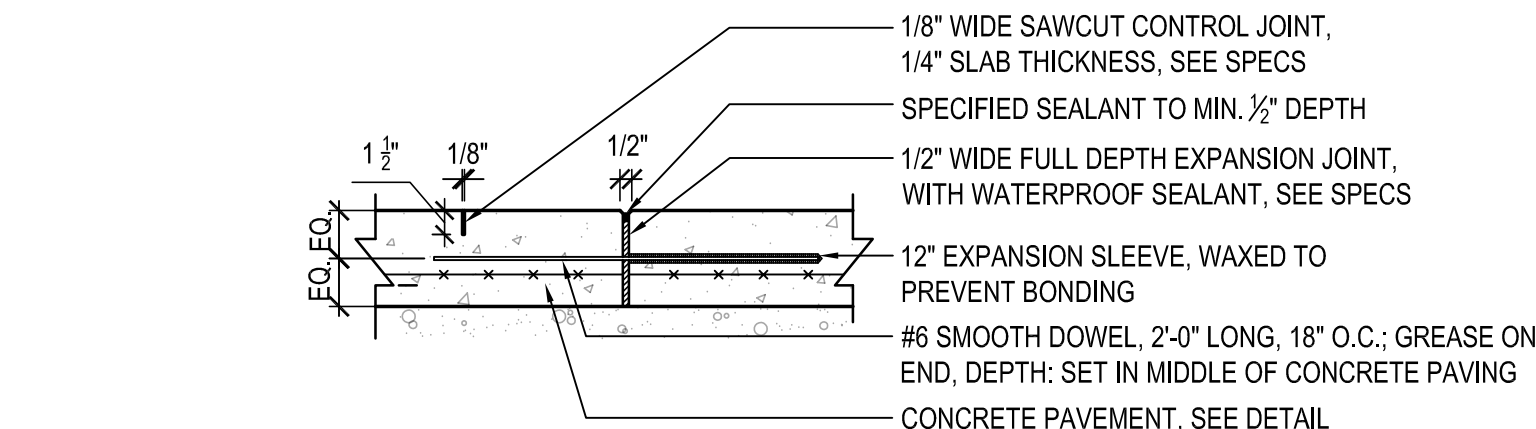
2 CONCRETE WALKWAY PAVING

SCALE: 1" = 1'-0"



6 FLUSH CAST IN PLACE CONCRETE CURB

SCALE: 1" = 1'-0"



### EXPANSION JOINT INSTALLATION NOTES:

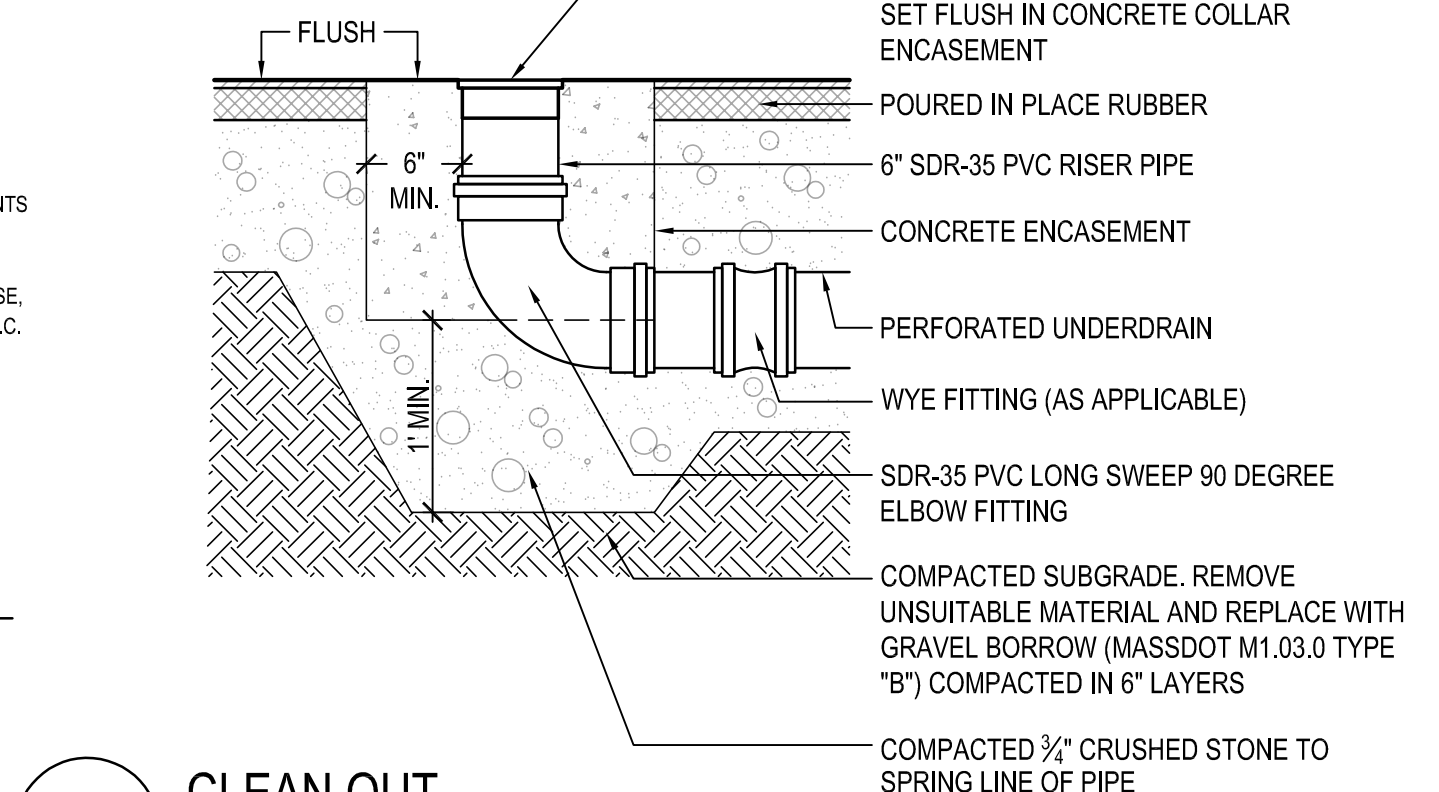
1. DOWEL IS TYPICAL AT ALL EXPANSION JOINTS WITHIN CONCRETE PAVING AND BETWEEN CONCRETE PAVING AND CONCRETE STAIRS.
2. DELETE EXPANSION SLEEVE AND DOWEL WHERE JOINT ABUTS WALL, CURBS, OR OTHER VERTICAL SURFACES.
3. EXPANSION JOINTS MAX. 30'-0" O.C. UNLESS SHOWN OTHERWISE.

### CONTROL JOINT INSTALLATION NOTES:

1. CONTROL JOINTS 10'-0" O.C. UNLESS SHOWN OTHERWISE ON DRAWINGS.

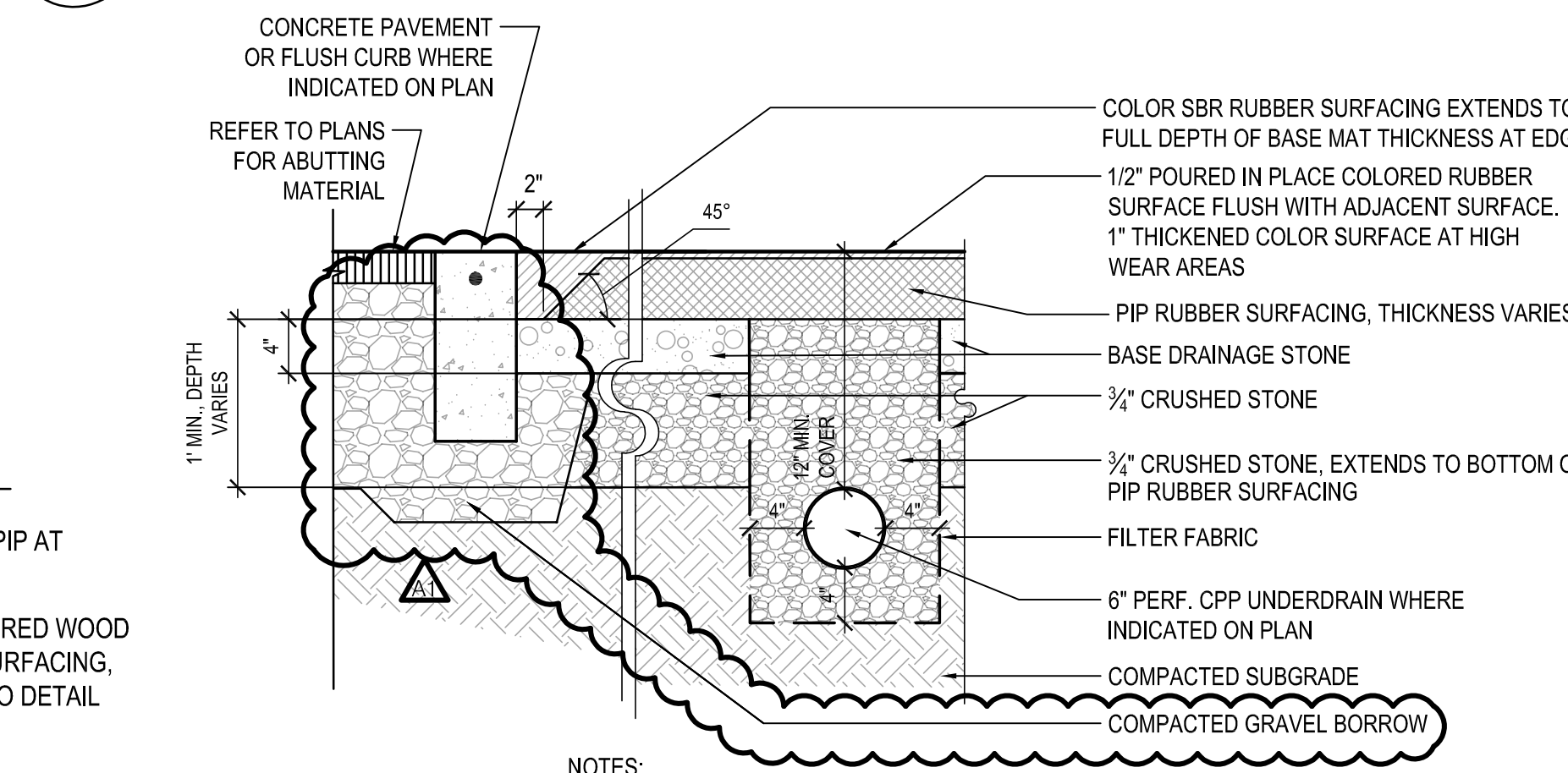
3 EXPANSION JOINT

SCALE: 1" = 1'-0"



7 CLEAN OUT

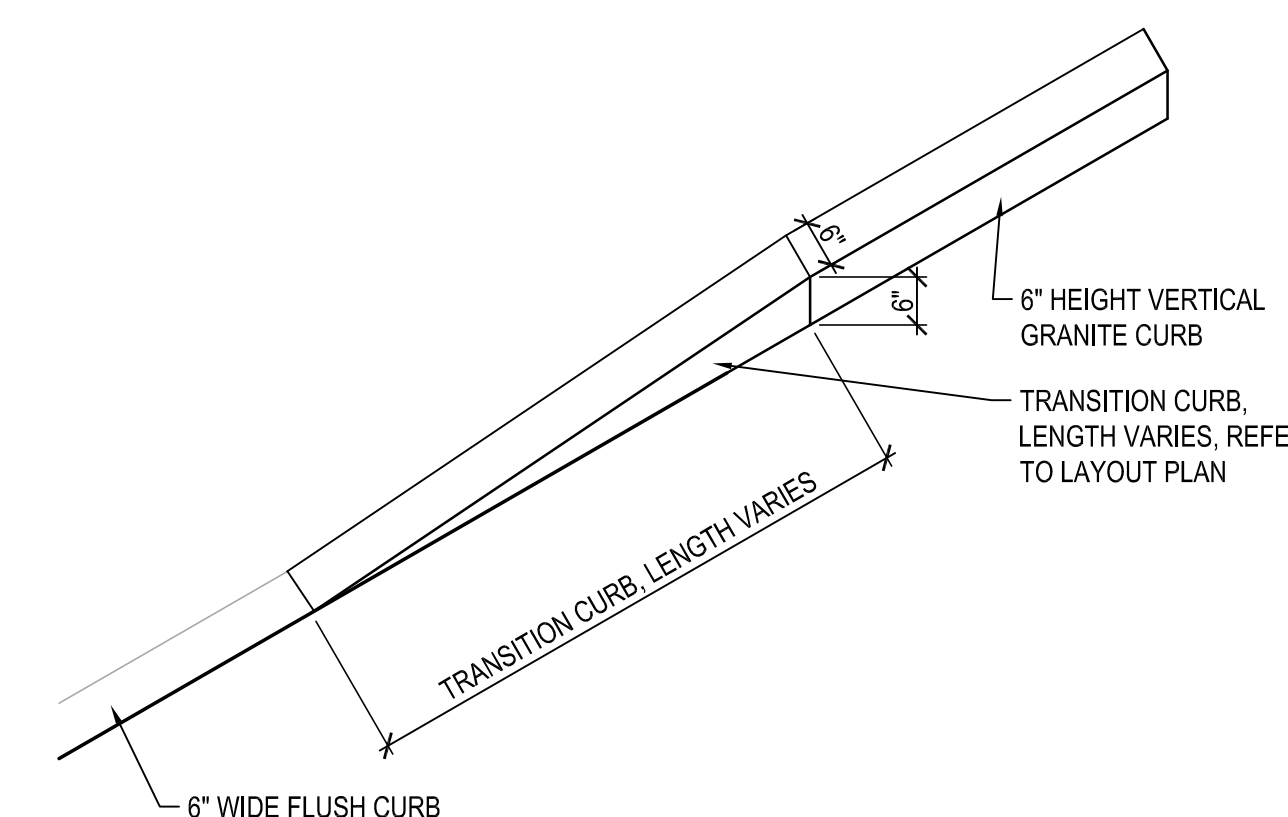
SCALE: 1" = 1'-0"



- NOTES:
1. RUBBER BASE MAT THICKNESS VARIES.
  2. MUST MEET CPSC SAFETY REQUIREMENTS.
  3. PIP EDGE TO SLOPE DOWN TO SUBGRADE WHERE NO CURB/EDGE IS SHOWN ON PLAN.
  4. 1" THICKENED COLOR SURFACE AT HIGH WEAR AREAS (BELOW SWINGS AND EXIT OF SLIDE). MIN. AREA TO BE 4'x4'.

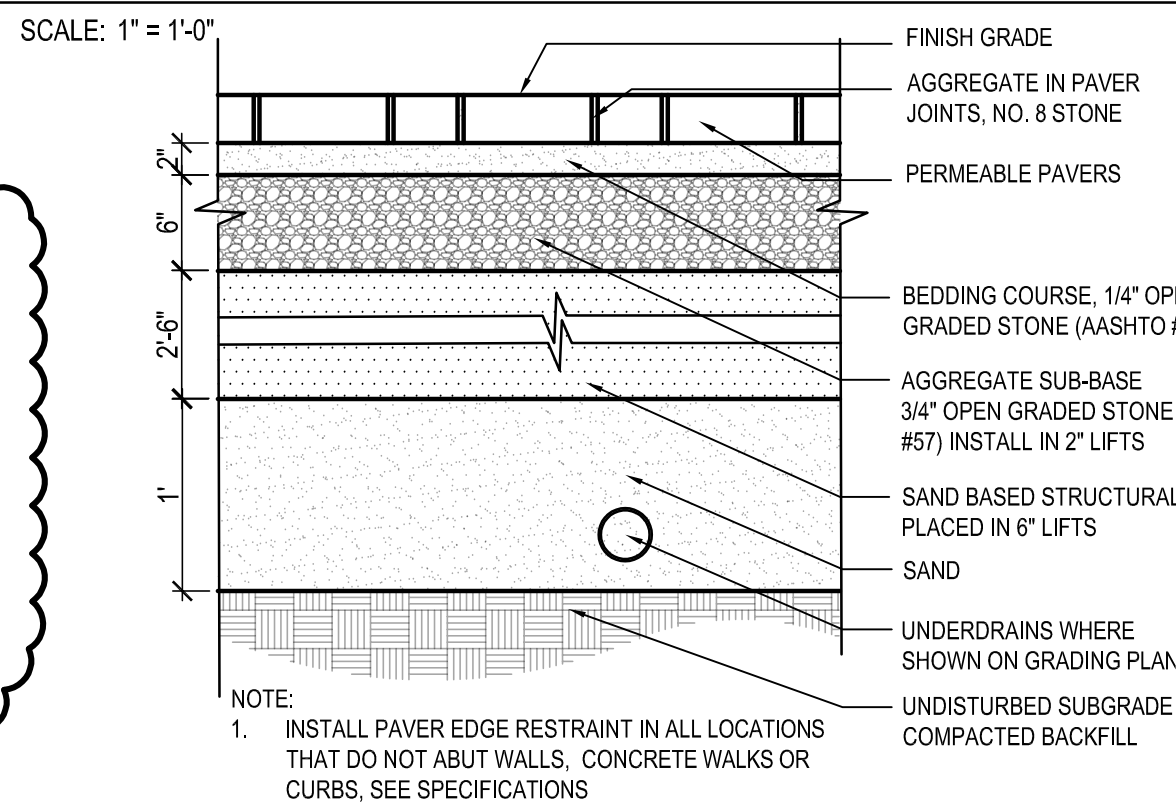
8 P.I.P. RUBBER SURFACING

SCALE: 1" = 1'-0"



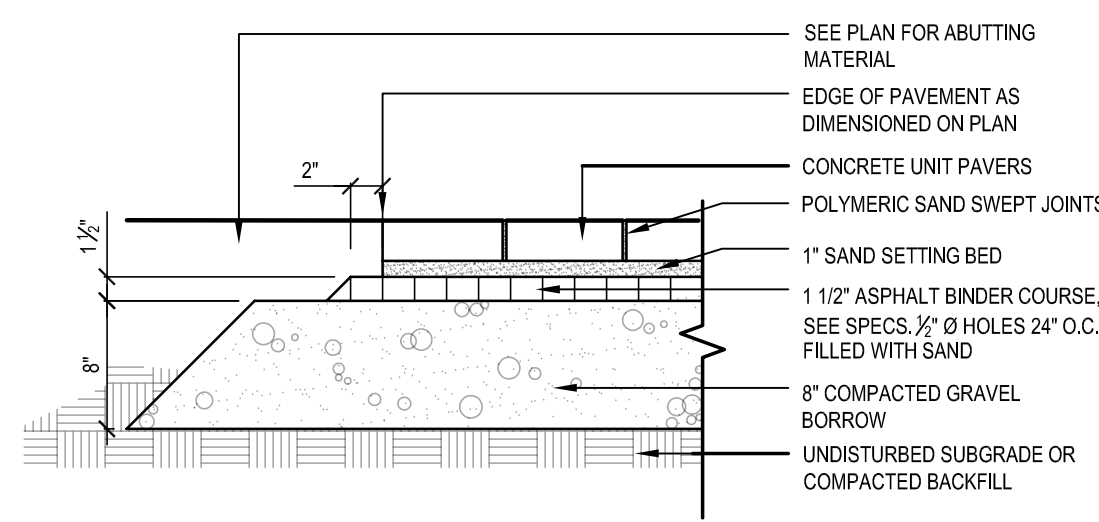
4 TRANSITION CURB

SCALE: 1/2" = 1'-0"



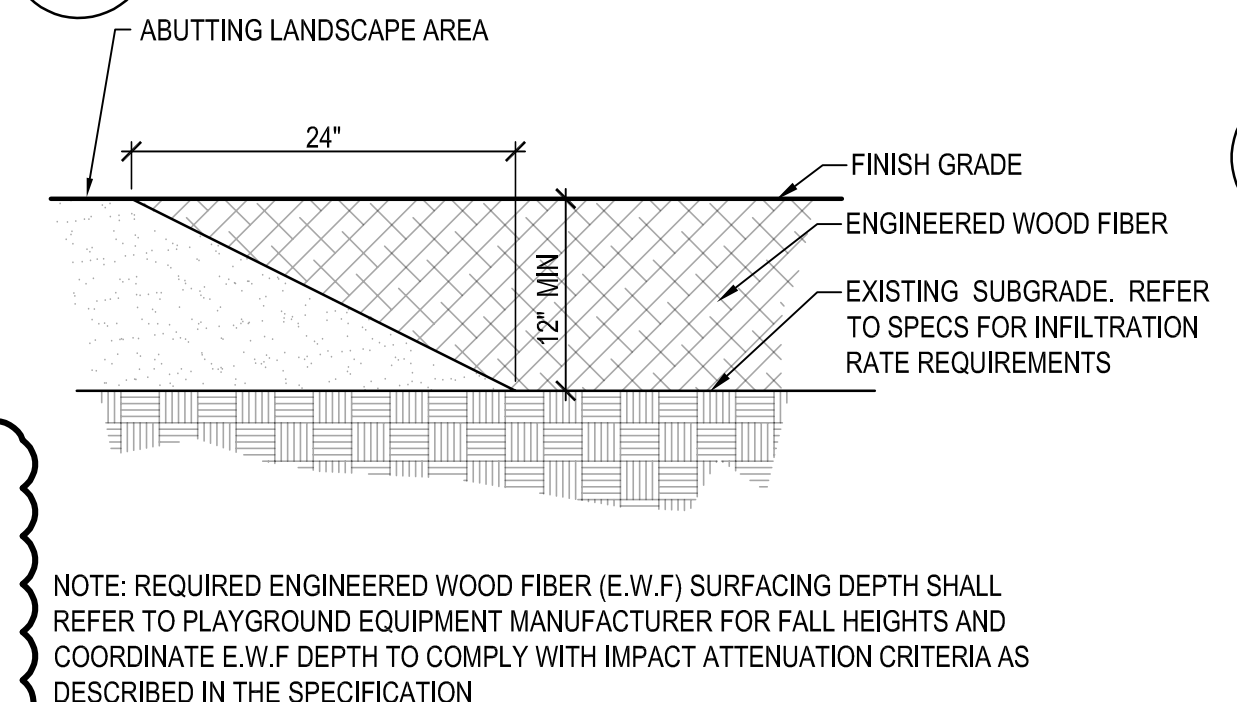
10 PERMEABLE CONCRETE UNIT PAVERS

SCALE: 1" = 1'-0"



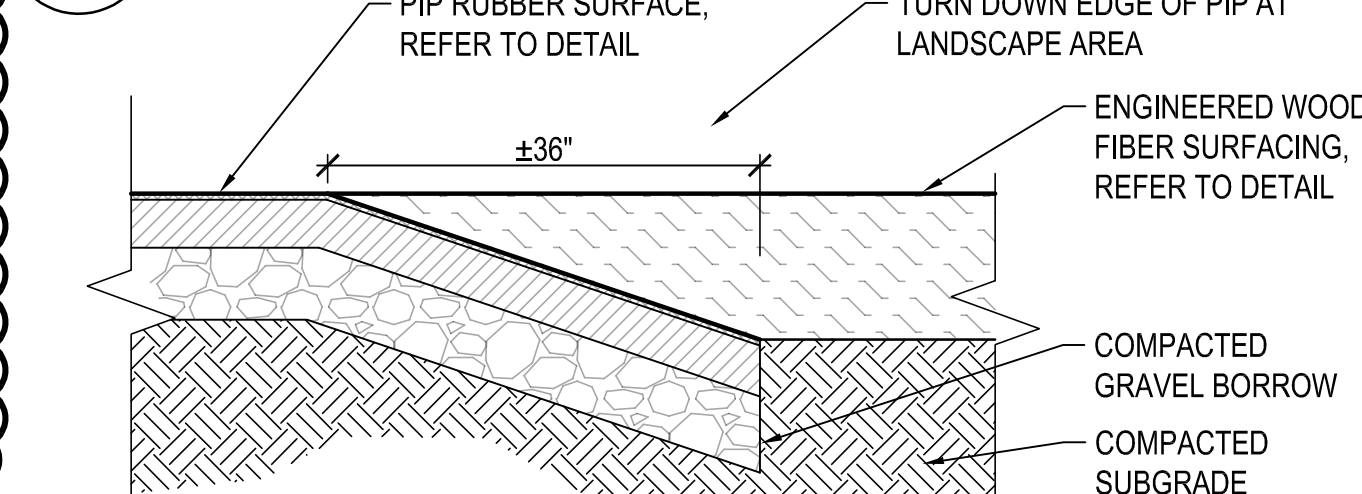
11 RESET MEMORIAL BRICKS ON ASPHALT

SCALE: 1" = 1'-0"



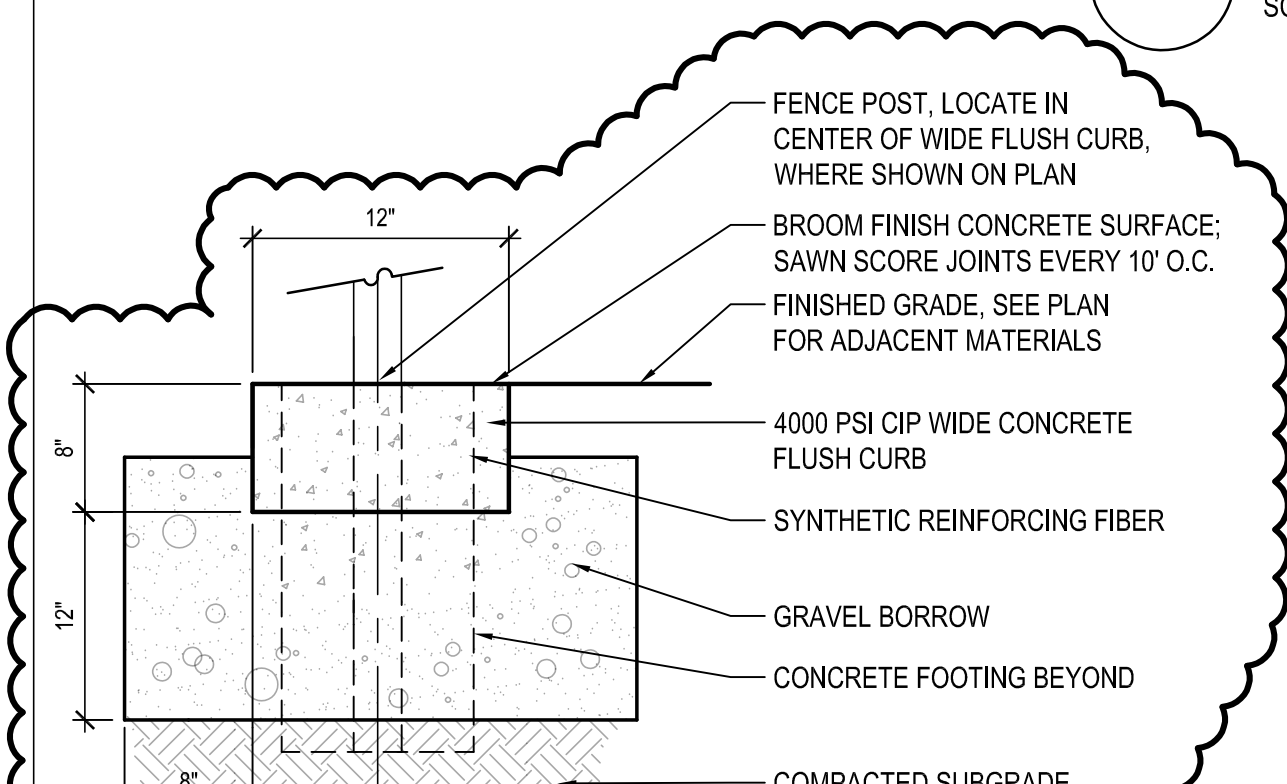
12 ENGINEERED WOOD FIBER SAFETY SURFACING

SCALE: 1" = 1'-0"



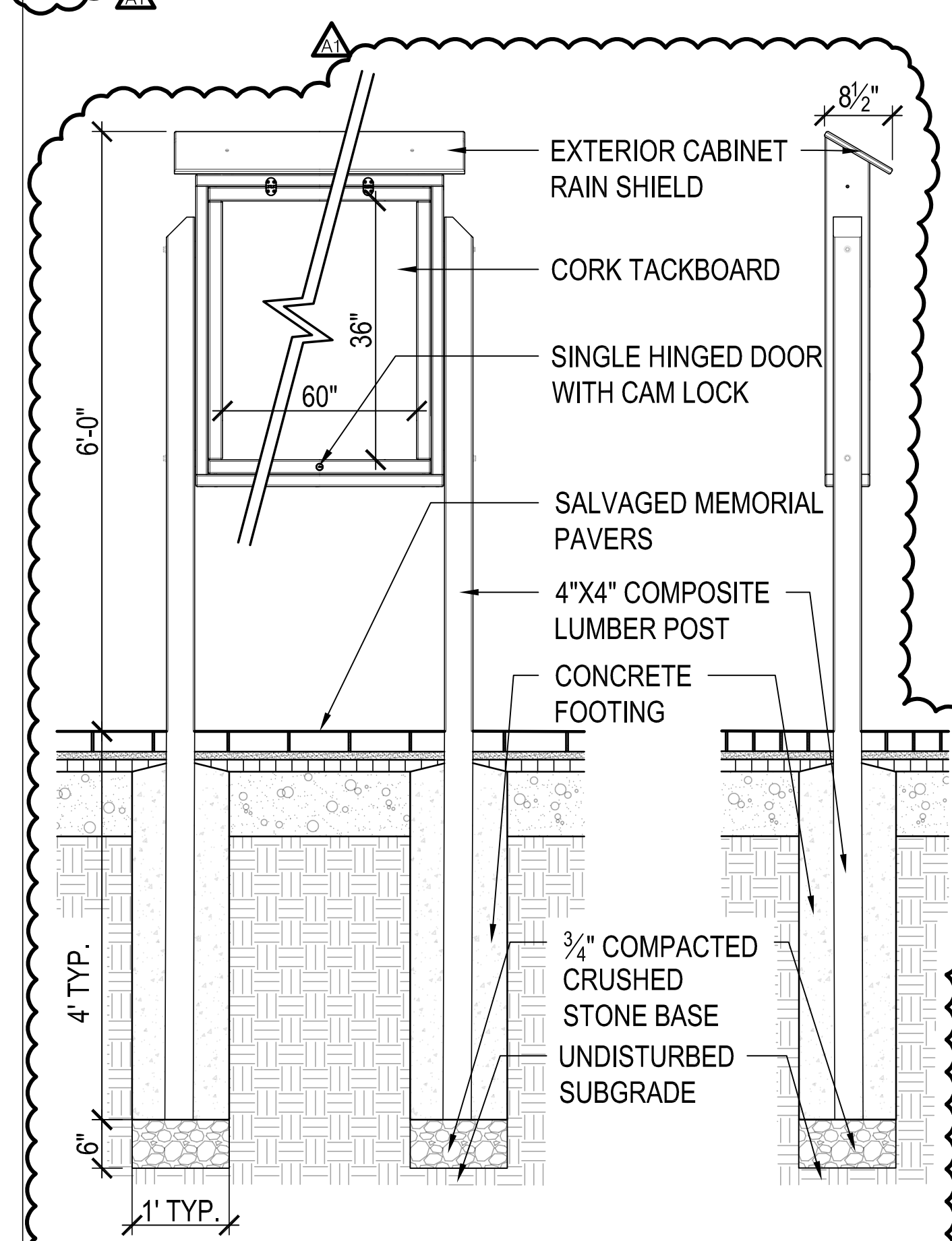
13 PIP RUBBER TO EWF TRANSITION

SCALE: 3/4" = 1'-0"



14 WIDE FLUSH CURB WITH FENCE

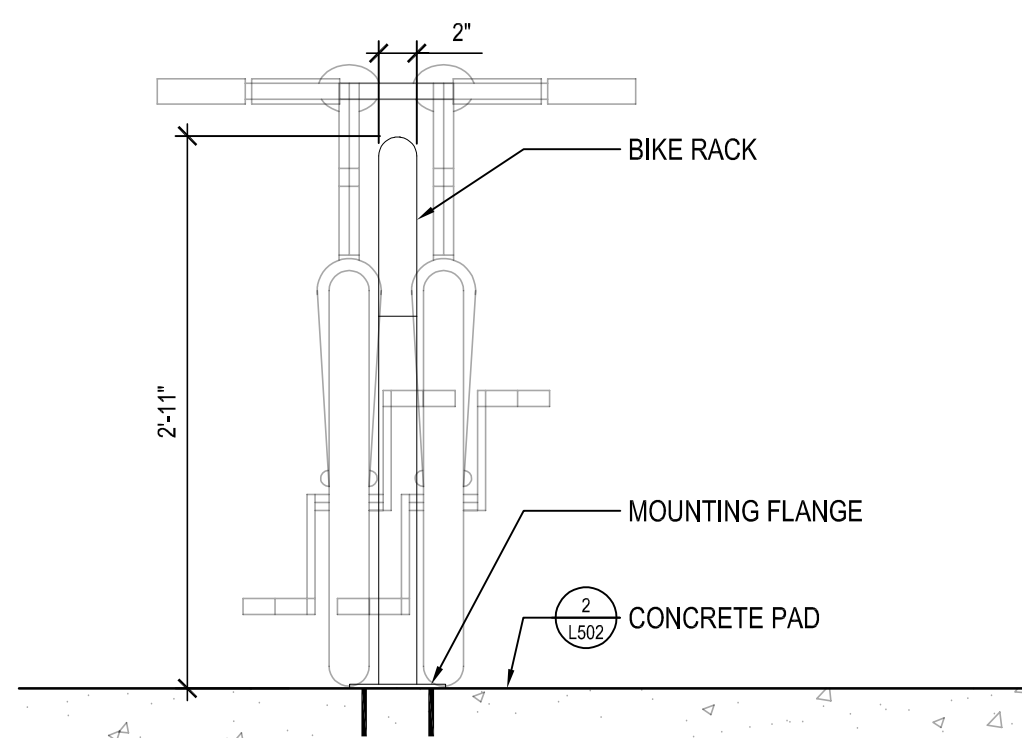
SCALE: 1" = 1'-0"



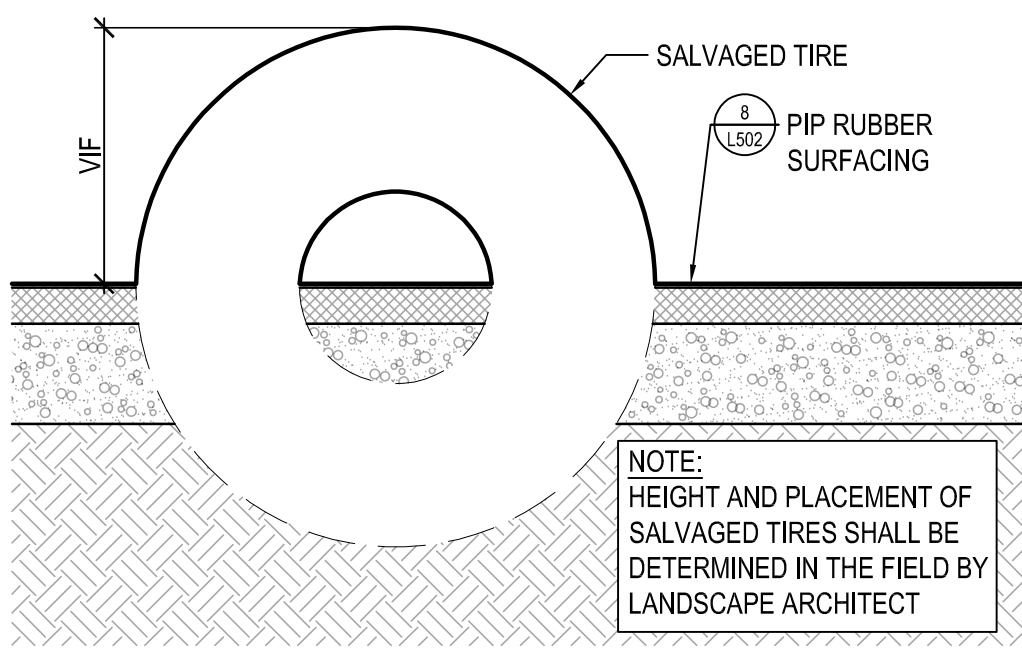
15 COMMUNITY MESSAGE BOARD

SCALE: 3/4" = 1'-0"

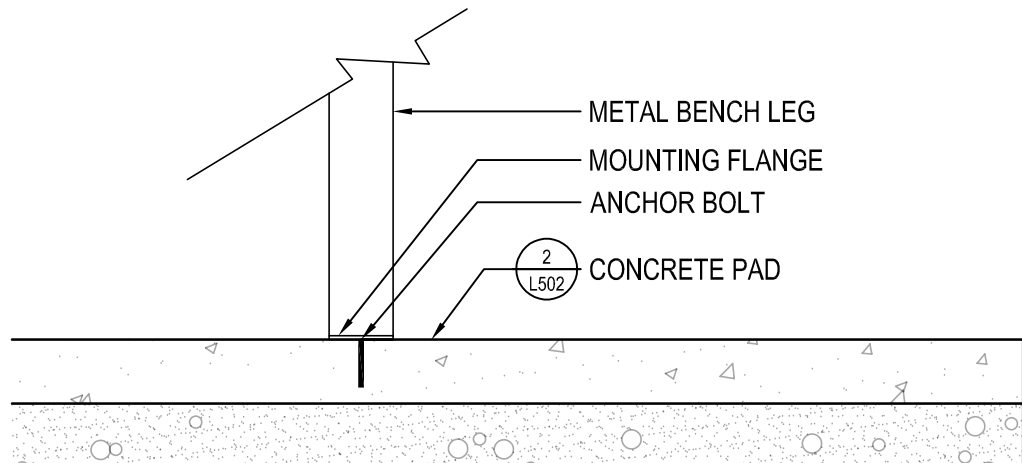




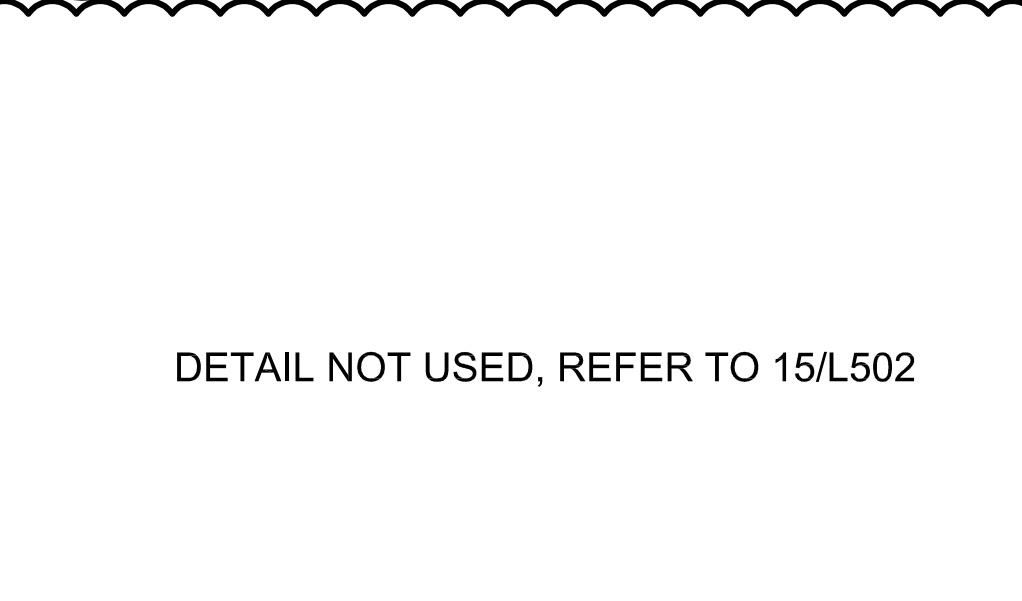
10 OWNER PURCHASED BIKE RACK  
SCALE: 1" = 1'-0"



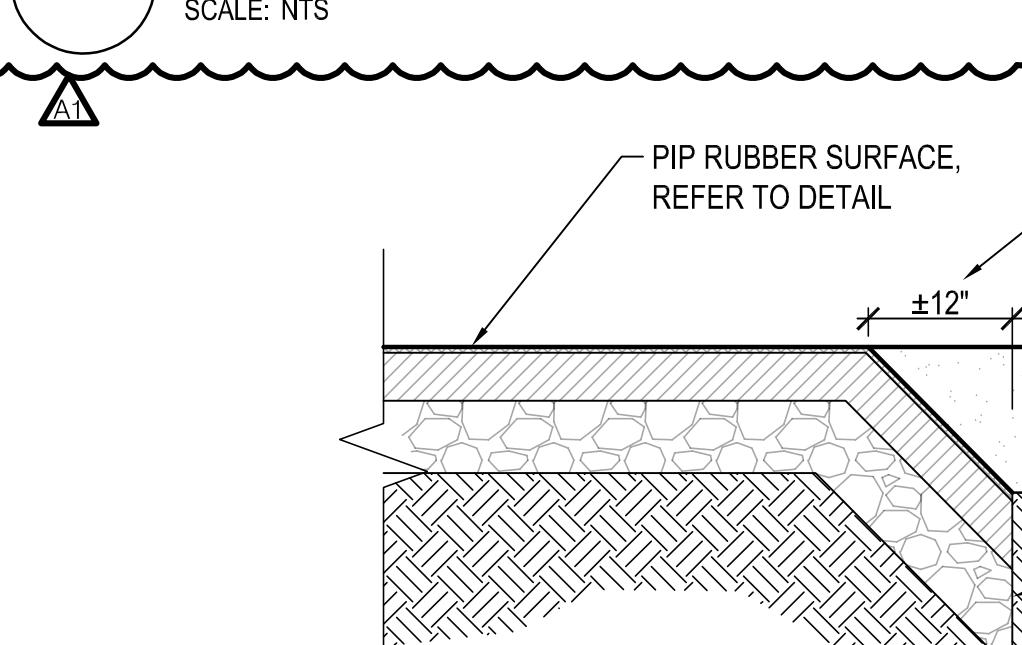
11 RESET SALVAGED TIRE  
SCALE: 1/2" = 1'-0"



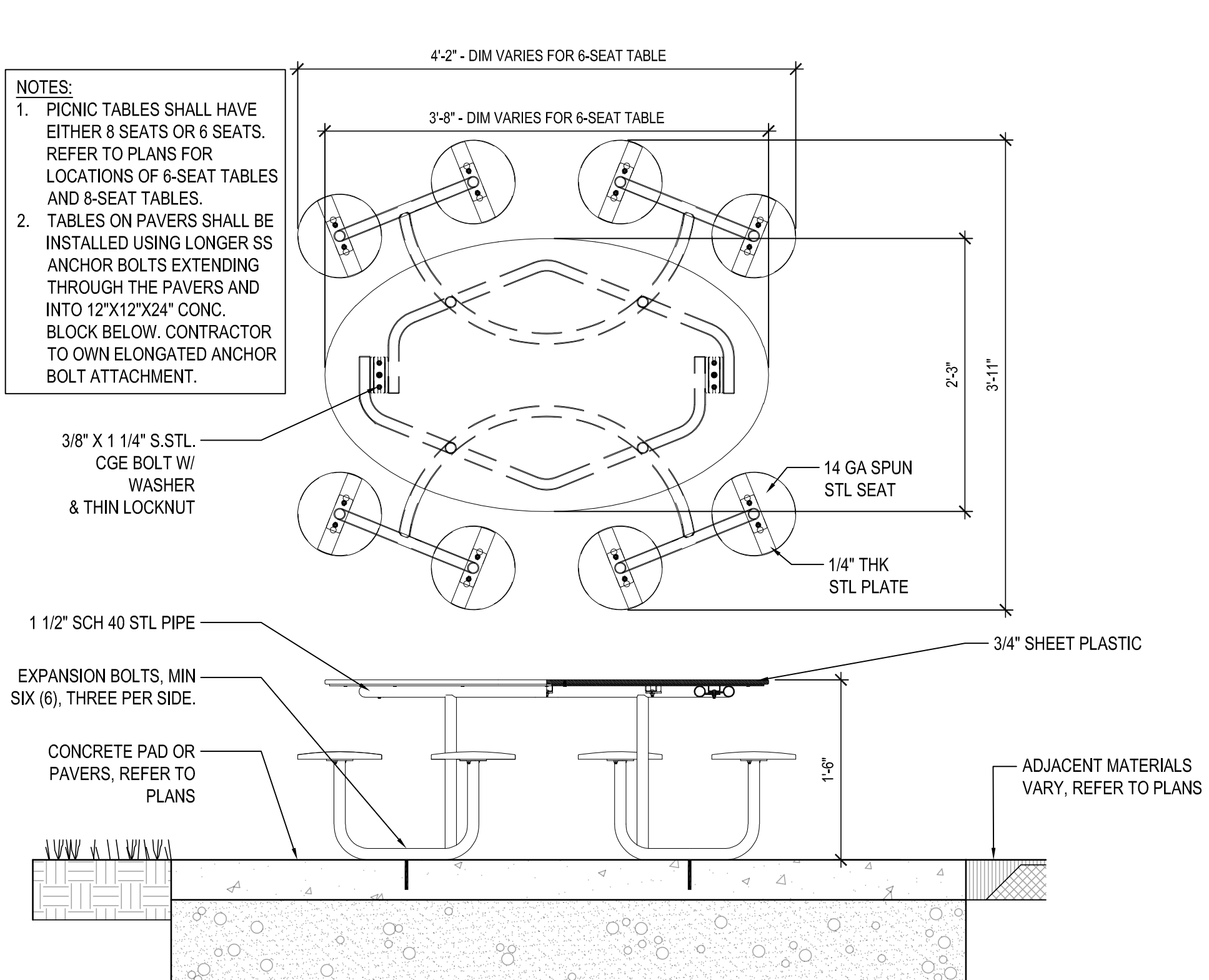
12 RESET BUDDY BENCH  
SCALE: 1" = 1'-0"



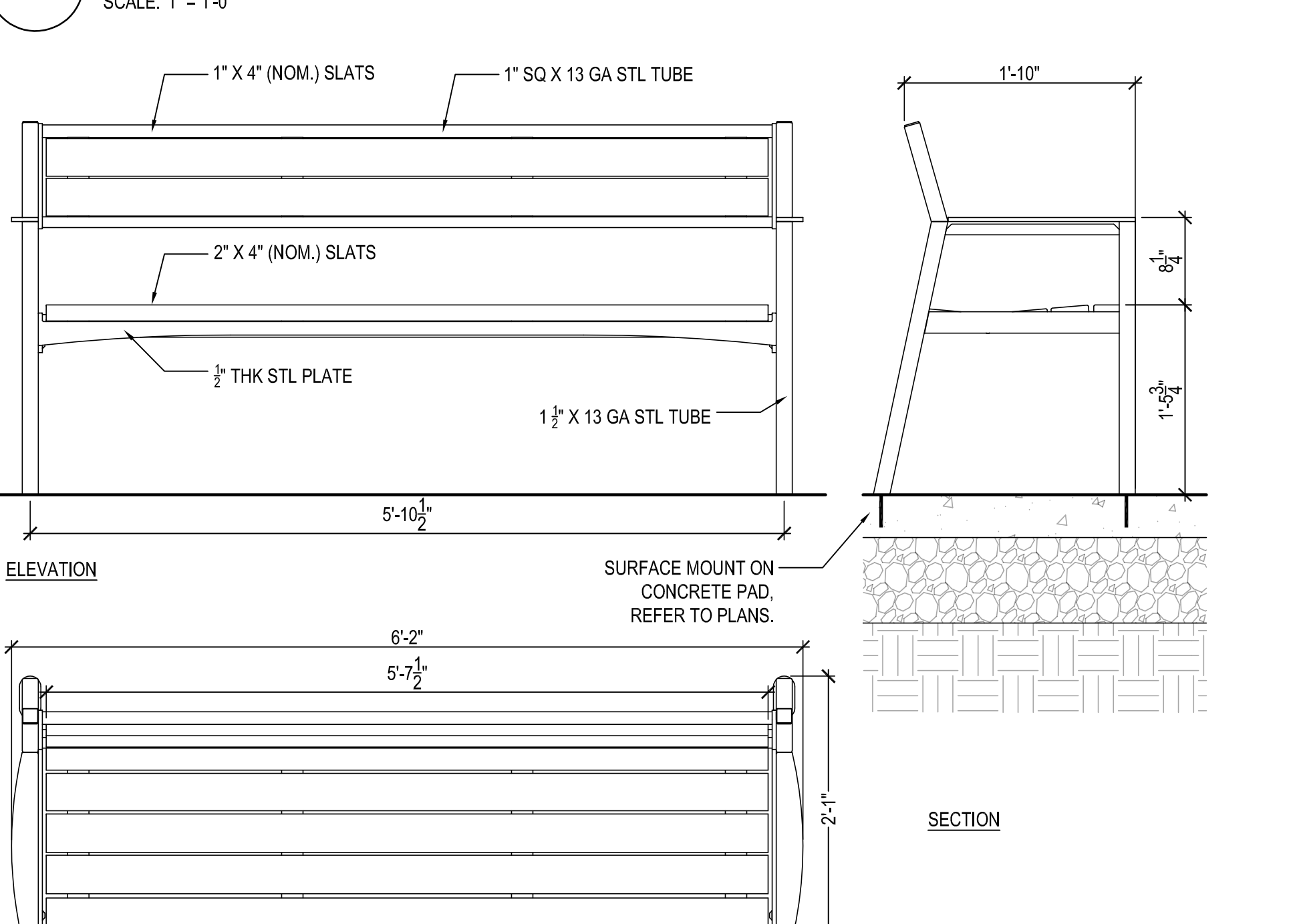
13 RESET COMMUNITY SIGN  
SCALE: NTS



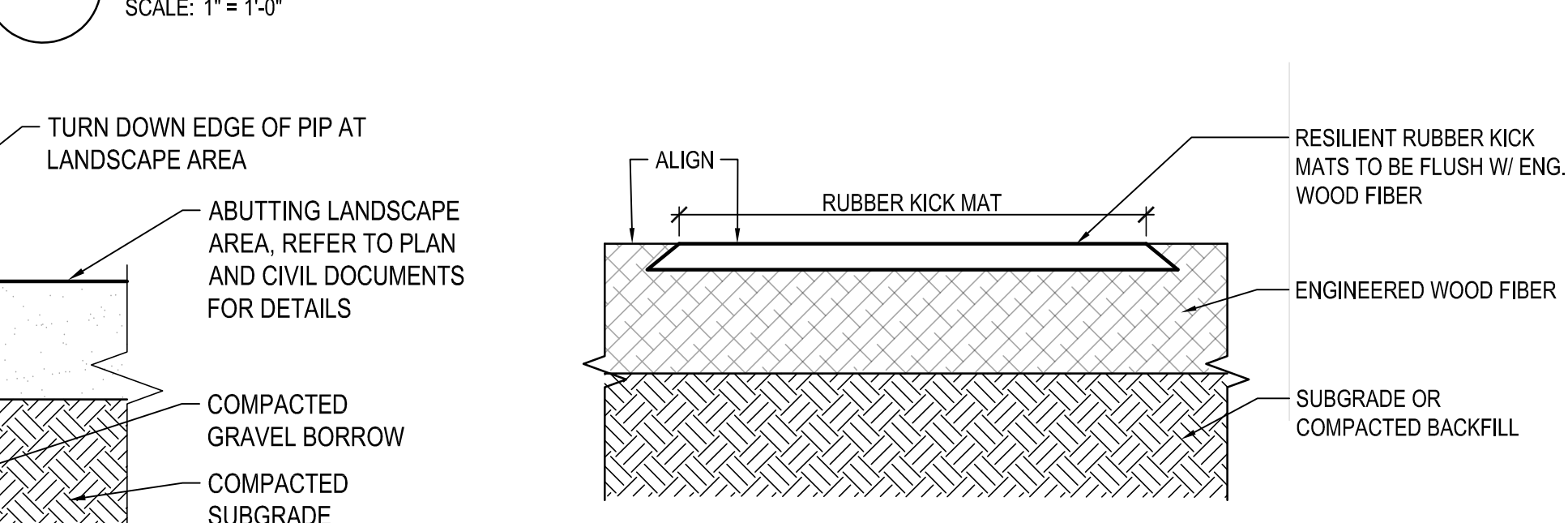
14 PIP RUBBER TURN DOWN EDGE  
SCALE: 3/4" = 1'-0"



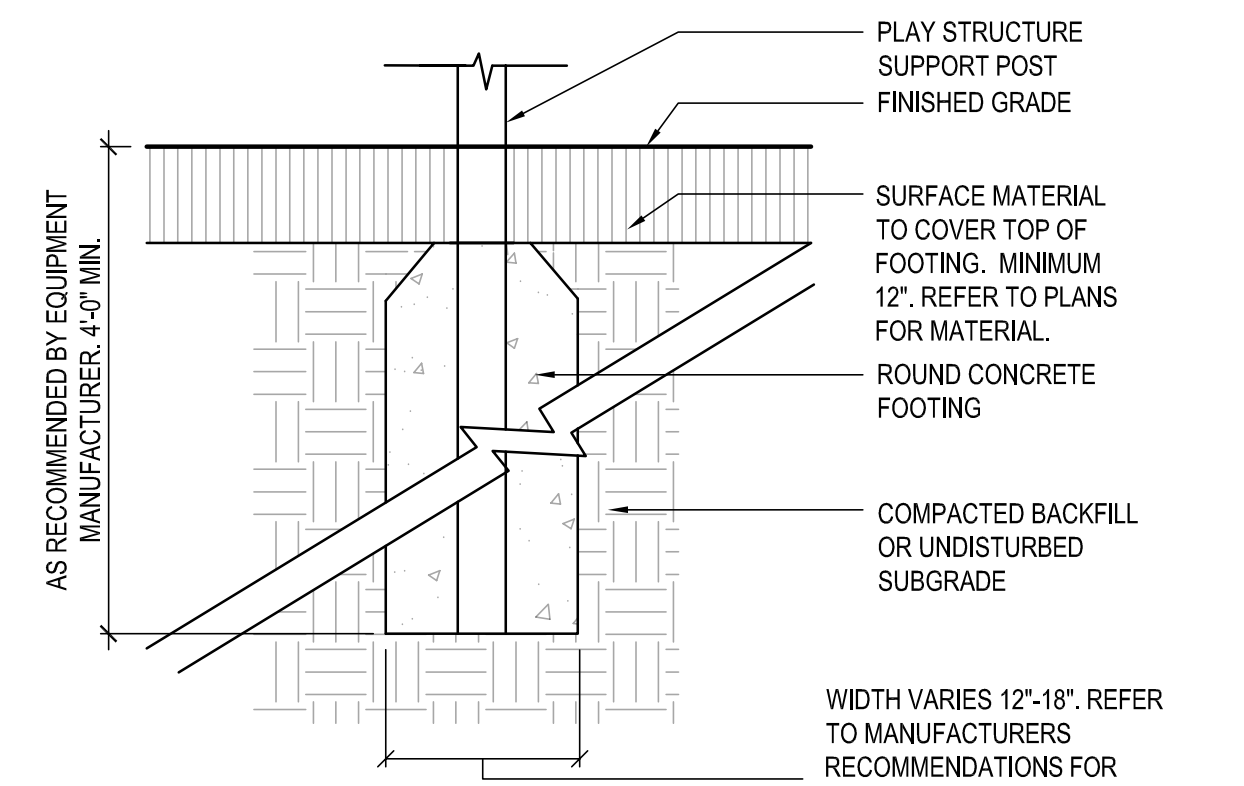
7 OWNER PURCHASED PICNIC TABLE  
SCALE: 1" = 1'-0"



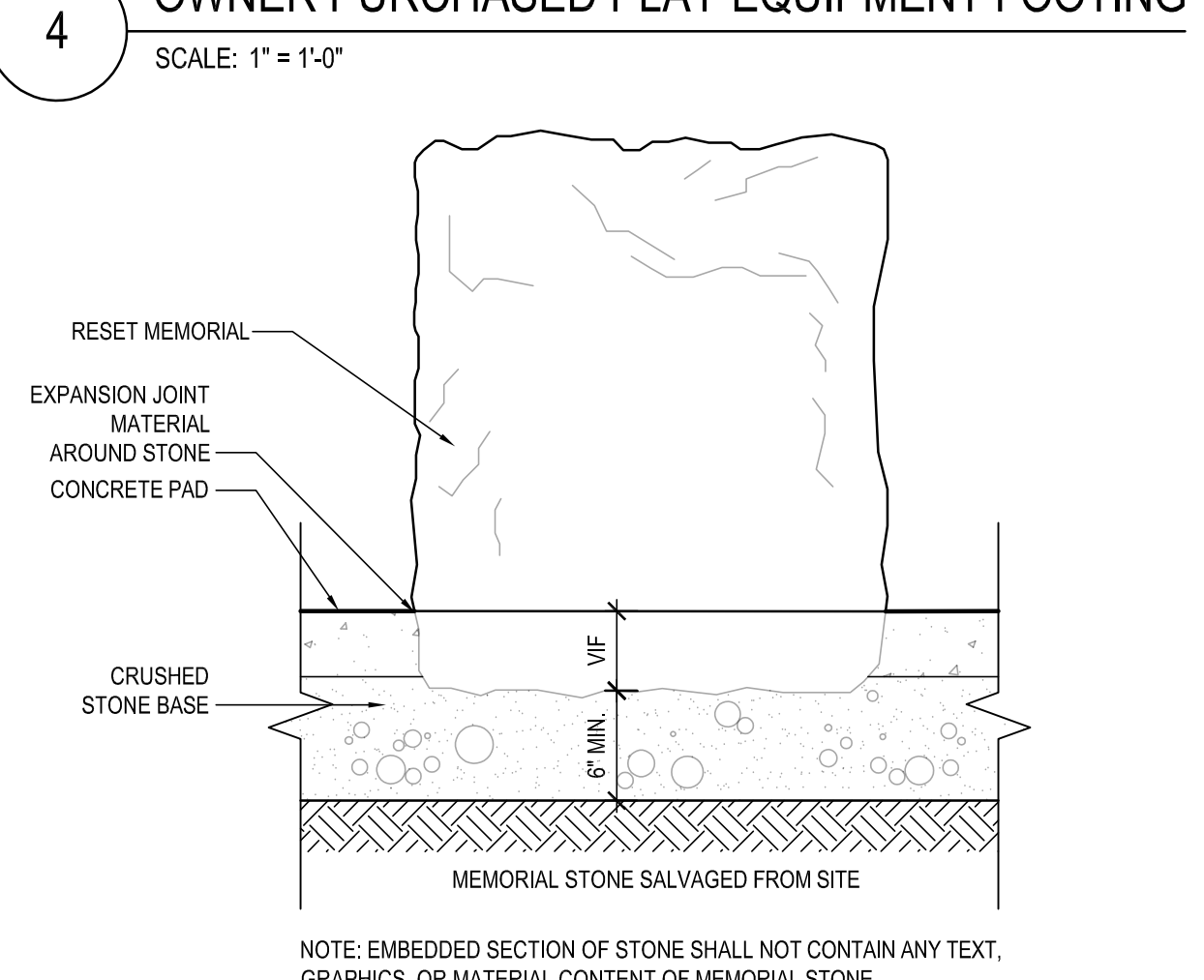
8 OWNER PURCHASED BACKED BENCH  
SCALE: 1" = 1'-0"



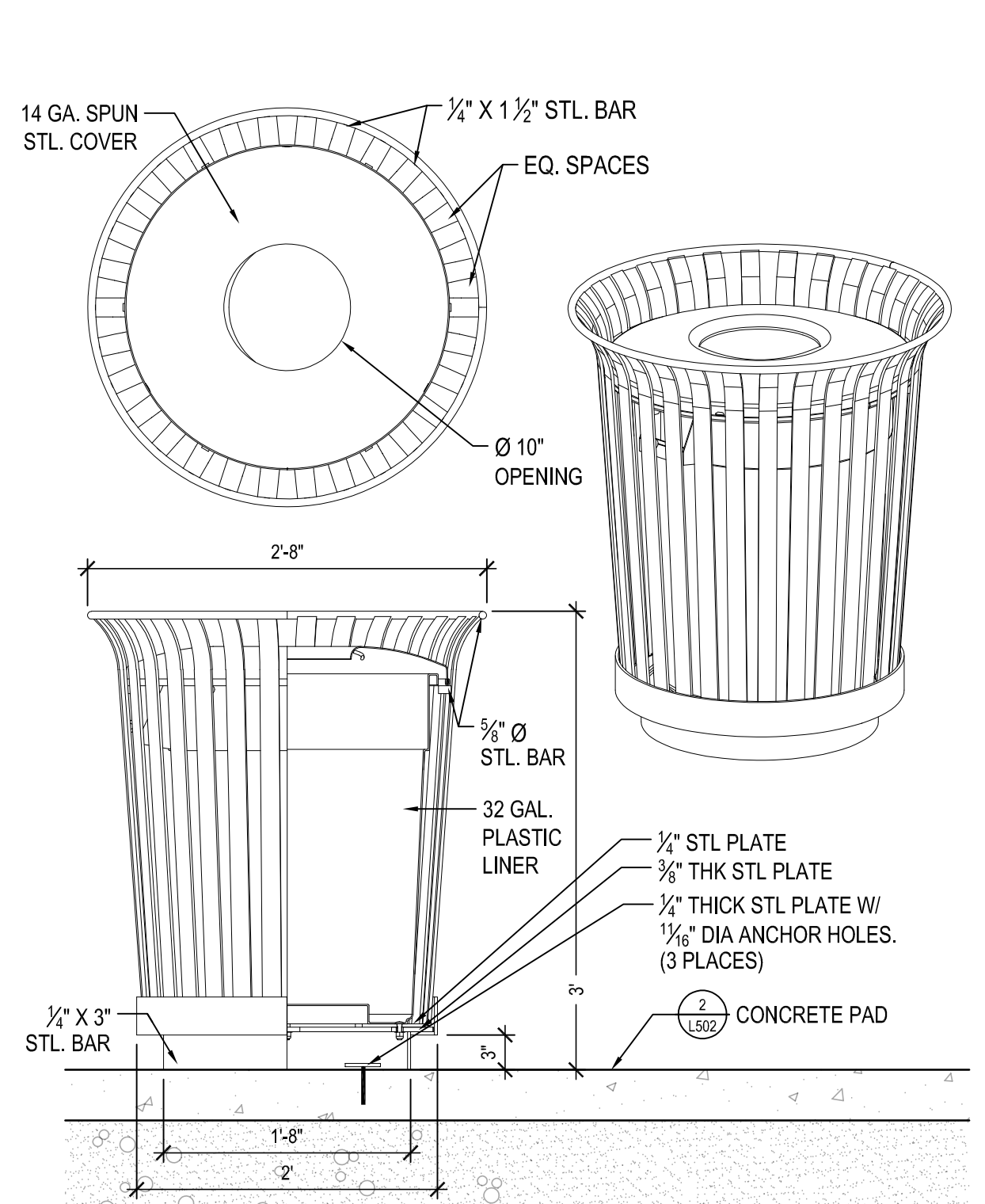
9 RUBBER KICK MAT AT EWF  
SCALE: 1" = 1'-0"



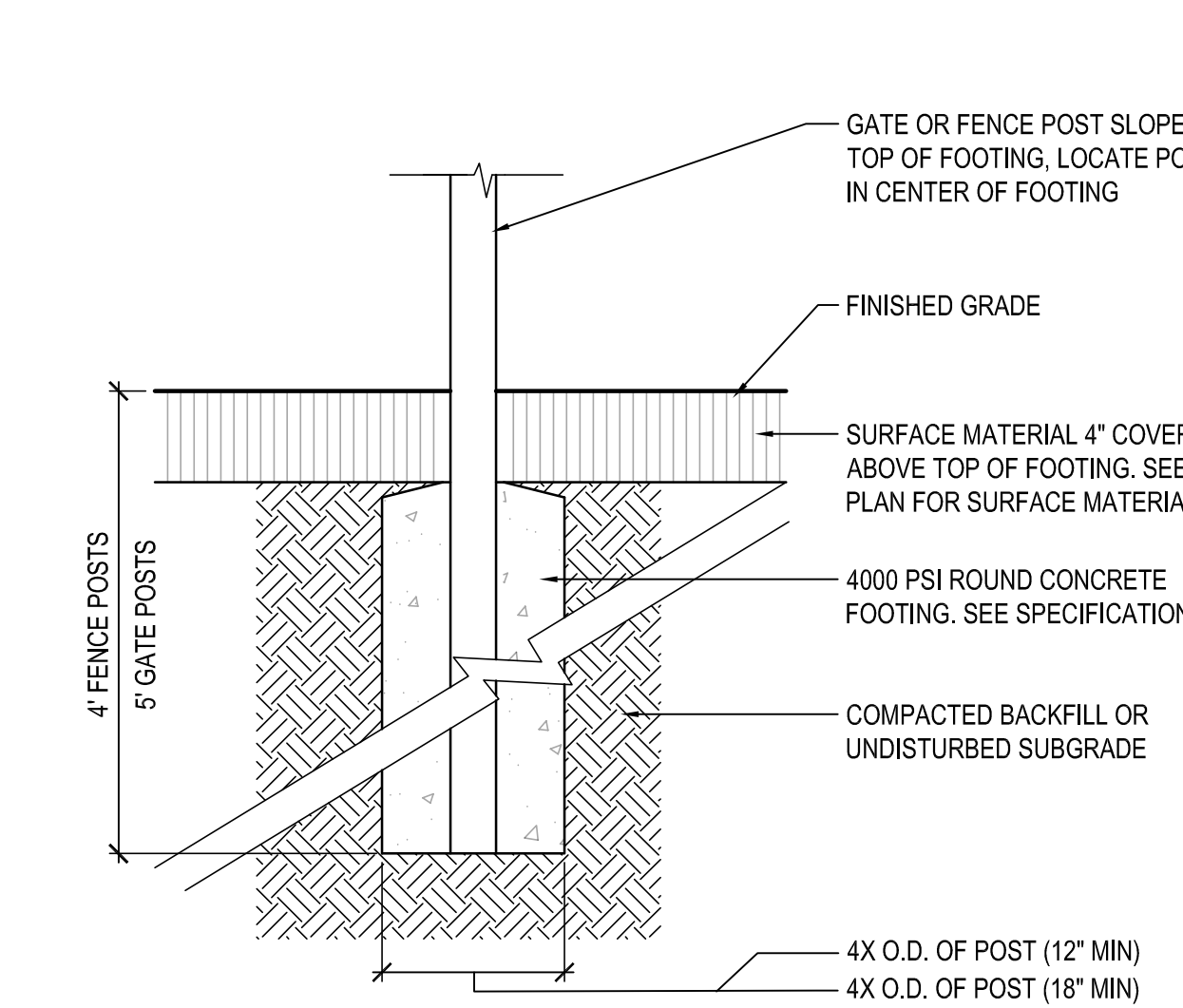
4 OWNER PURCHASED PLAY EQUIPMENT FOOTING  
SCALE: 1" = 1'-0"



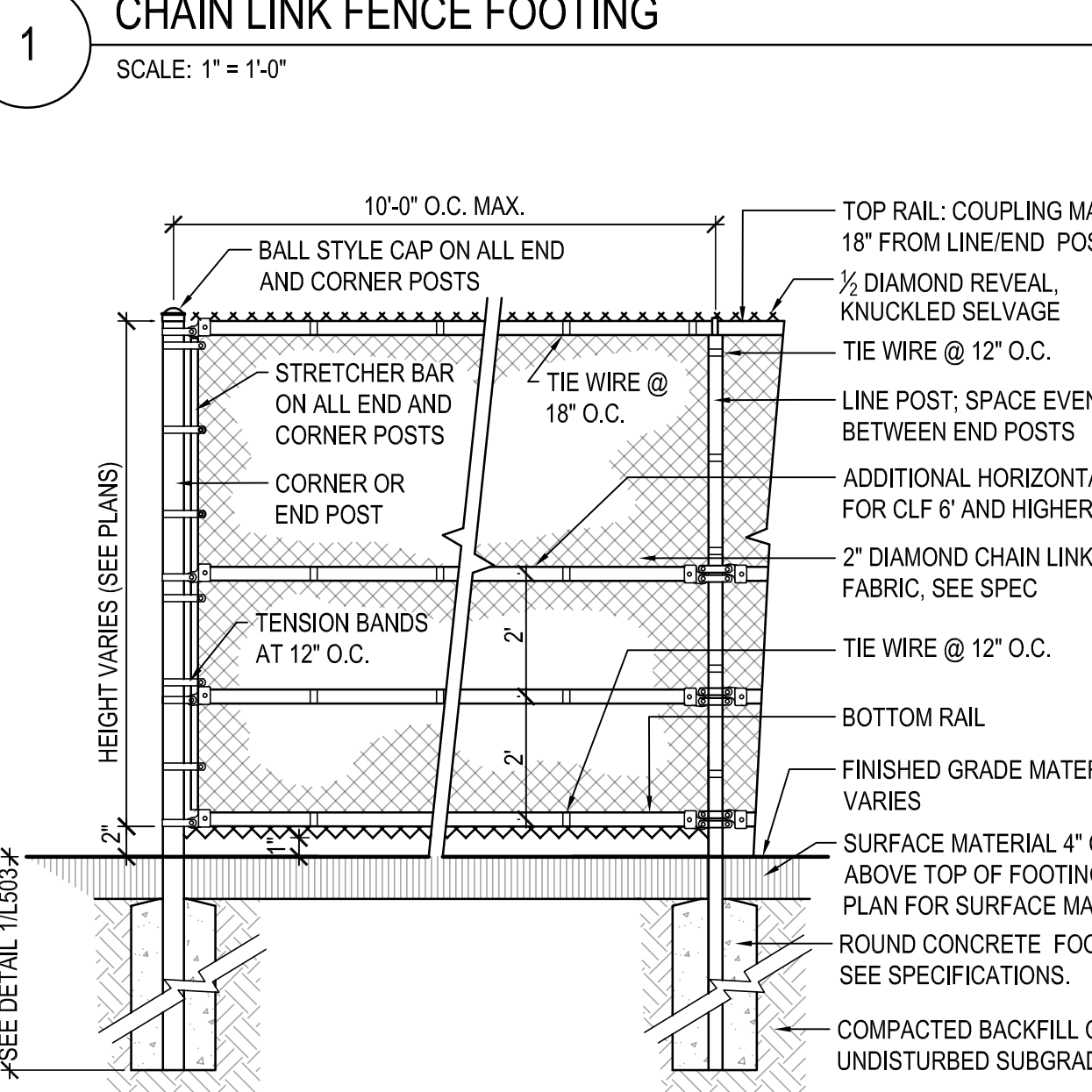
5 RESET MEMORIAL STONE  
SCALE: 1" = 1'-0"



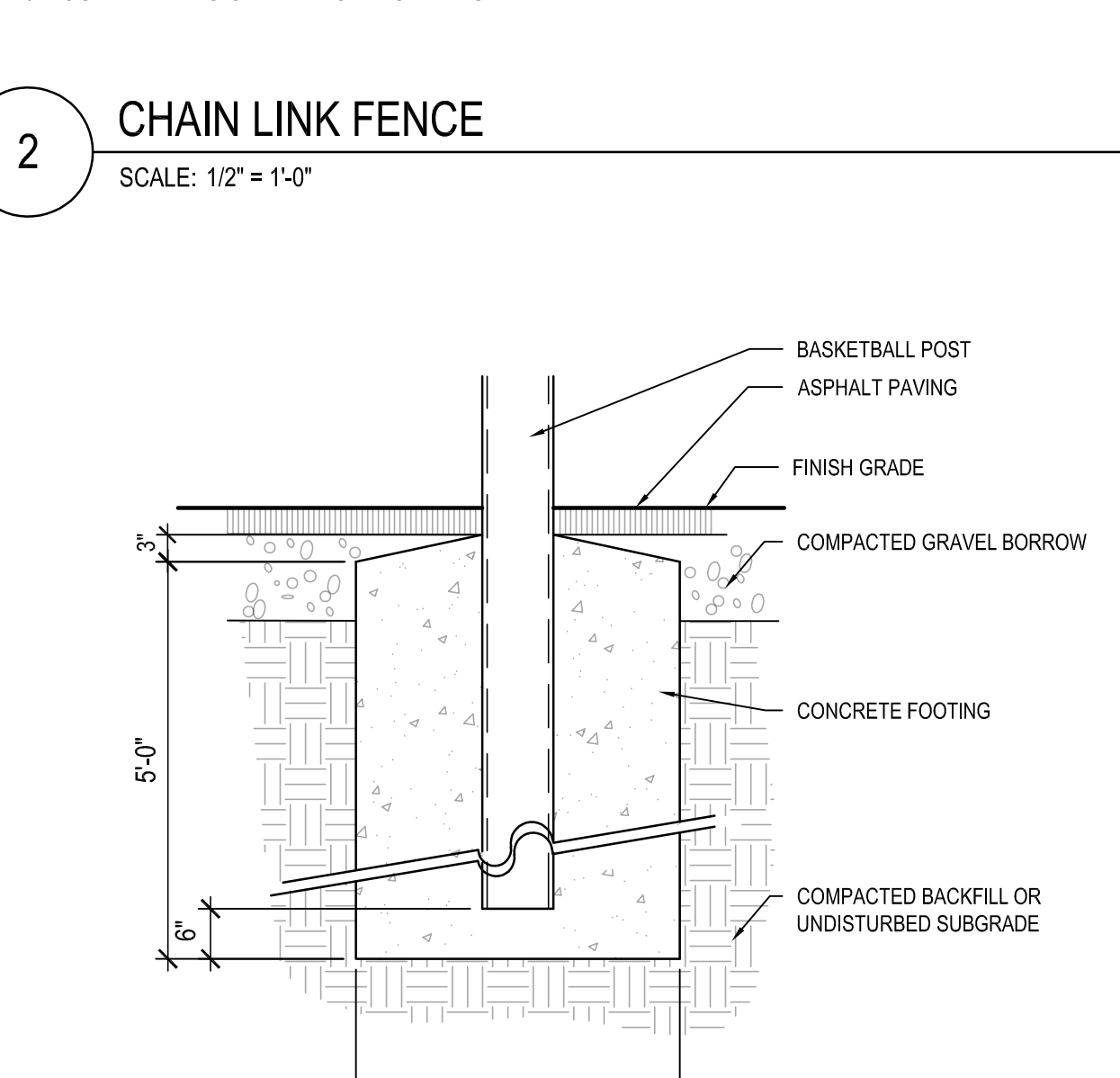
6 OWNER PURCHASED TRASH RECEPTACLE  
SCALE: 1" = 1'-0"



1 CHAIN LINK FENCE FOOTING  
SCALE: 1" = 1'-0"



2 CHAIN LINK FENCE  
SCALE: 1/2" = 1'-0"



3 OWNER PURCHASED BASKETBALL GOAL FOOTING  
SCALE: 3/4" = 1'-0"

STRATTON  
SCHOOL,  
BISHOP  
SCHOOL, AND  
PEIRCE  
SCHOOL  
PLAYGROUNDS

ARLINGTON  
MASSACHUSETTS

PREPARED FOR:  
TOWN OF ARLINGTON  
STRATTON SCHOOL  
180 MOUNTAIN AVE,  
ARLINGTON, MA 02474  
BISHOP SCHOOL  
25 COLUMBIA ROAD,  
ARLINGTON, MA 02474  
PEIRCE SCHOOL  
85 PARK AVENUE EXTENSION,  
ARLINGTON, MA 02474

BID DOCUMENTS

REVISIONS

NO.	DATE	DESCRIPTION
A1	5/3/22	ADDENDUM #1

DATE: 2022-04-20

SCALE: AS NOTED

JOB #: 22201

DRAWN BY: EH/AA

CHECKED BY: DW

LANDSCAPE  
DETAILS

L503